



# Safety Data Sheet

Issuing Date: 1-Jun-2008

Revision Date: 27-Mar-2015

SDS Number: 9109

## 1. Identification of the Substance / Preparation and of the Company / Undertaking

### Product identifier

**Product Name** Napa -20 degree Windshield Washer Fluid  
**Stock / Part Number** 114705 / WWS.MINUS20

### Other means of identification

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Windshield Wiper Fluid  
**Uses advised against** No information available

### Details of the supplier of the safety data sheet

**Supplier Name** South/Win, Ltd  
**Supplier Address** 112 Maxfield Rd.  
Greensboro, NC 27405  
US  
**Supplier Phone Number** Phone: (800) 648-4393  
Fax: (336) 398-5680

**Emergency Telephone Number** CHEMTREC: (800) 424-9300

## 2. Hazards Identification

### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Specific target organ toxicity (single exposure)	Category 1
Flammable liquids	Category 3


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## GHS Label elements, including precautionary statements

### Emergency Overview

<b>Signal Word</b>	<b>Danger</b>	
<b>Hazard Statement:</b> Harmful if swallowed Toxic if contact with skin Toxic if inhaled Causes damage to organs Flammable liquid and vapor		
<b>Appearance</b> Blue	<b>Physical State</b> Liquid	<b>Odor</b> Mild Alcohol

### Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Keep container tightly closed  
Ground/bond container and receiving equipment  
Use explosion-proof electrical/ ventilating/ lighting/ equipment  
Use only non-sparking tools  
Take precautionary measures against static discharge  
Keep cool

### Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician  
Specific treatment (see supplemental first aid instructions on this label)

### Skin

Call a POISON CENTER or doctor/physician if you feel unwell  
Wash contaminated clothing before reuse  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician

### Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth



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## Fire

In case of fire: Use CO2, dry chemical, or foam for extinction

## Precautionary Statements - Storage

Store locked up

Store in a well-ventilated place. Keep container tightly closed

## Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

## Hazards not otherwise classified (HNOC)

Not applicable

## Unknown Toxicity

0.1% of the mixture consists of ingredient(s) of unknown toxicity

## Other information

PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION

## Interactions with Other Chemicals

Use of alcoholic beverages may enhance toxic effects.

### 3. Composition / Information on Ingredients

Chemical Name	CAS No	Weight-%	Trade Secret
Methyl alcohol	67-56-1	30 - 40	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret

### 4. First Aid Measures

#### First aid measures

#### General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Seek immediate medical attention/advice. Remove contact lenses, if present and easy to do. Continue rinsing.



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<b>Skin Contact</b>	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, (trained personnel should) give oxygen.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

### Most important symptoms and effects, both acute and delayed

**Most Important Symptoms and Effects** Coughing and/ or wheezing. Difficulty in breathing.

### Indication of any immediate medical attention and special treatment needed

**Notes to Physician** Treat symptomatically.

## 5. Fire-fighting Measures

### Suitable Extinguishing Media

Dry chemical, CO<sub>2</sub>, water spray or regular foam. Use water spray or fog; do not use straight streams.

### Unsuitable extinguishing media

CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient.

### Specific Hazards Arising from the Chemical

Some may be transported hot.

**Uniform Fire Code** Flammable Liquid: I-C

### Hazardous Combustion Products

Carbon oxides.

### Explosion Data

**Sensitivity to Mechanical Impact** No.

**Sensitivity to Static Discharge** Yes.



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## Protective equipment and precautions for firefighters

Move containers from fire area if you can do it without risk.

## 6. Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Do not breathe vapor or mist. Keep people away from and upwind of spill/leak. See section 8 for more information. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

**Other Information** Water spray may reduce vapor; but may not prevent ignition in closed spaces.

### Environmental Precautions

**Environmental Precautions** Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for Containment** A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

**Methods for cleaning up** Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.



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## 7. Handling and Storage

### Precautions for safe handling

#### Handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Do not breathe vapor or mist. Use only with adequate ventilation and in closed systems. Use personal protection equipment. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions.

### Conditions for safe storage, including any incompatibilities

#### Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Protect from moisture. Store away from other materials. Store locked up. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

#### Incompatible Products

None known based on information supplied.

## 8. Exposure Controls / Personal Protection

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl alcohol 67-56-1	STEL = 250 ppm TWA: 200 ppm S*	TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m <sup>3</sup> (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m <sup>3</sup> (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m <sup>3</sup> STEL: 325 mg/m <sup>3</sup> STEL: 250 ppm

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits Immediately Dangerous to Life or Health

#### Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992) See section 15 for national exposure control parameters



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## Appropriate engineering controls

**Engineering Measures**      Showers  
    Eyewash stations  
    Ventilation systems

## Individual protection measures, such as personal protective equipment

**Eye/Face Protection**      None required for consumer use. If splashes are likely to occur: Wear safety glasses with side shields (or goggles).

**Skin and Body Protection** None required for consumer use. Repeated or prolonged contact: Wear protective gloves and protective clothing.

**Respiratory Protection**    No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Hygiene Measures**            Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. No information available. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not breathe vapor or mist. Contaminated work clothing should not be allowed out of the workplace.

## 9. Physical and Chemical Properties

### Physical and Chemical Properties

<b>Physical State</b>	Liquid	<b>Odor</b>	Mild Alcohol
<b>Appearance</b>	Liquid	<b>Odor Threshold</b>	No information available
<b>Color</b>	Blue		

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH	8.5	None known	
Melting / freezing point	No data available	None known	
Boiling point / boiling range	86 °C / 187 °F	None known	
Flash Point	29 °C / 85 °F	None known	
Evaporation Rate	No data available	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limit in Air			
Upper flammability limit	No data available		
Lower flammability limit	No data available		
Vapor pressure	No data available	None known	
Vapor density	No data available	None known	



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<b>Specific Gravity</b>	No data available	None known
<b>Water Solubility</b>	Miscible in water	None known
<b>Solubility in other solvents</b>	No data available	None known
<b>Partition coefficient: n-octanol/water</b>	No data available	None known
<b>Autoignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	No data available	None known
<b>Explosive properties</b>	No data available	None known
<b>Oxidizing Properties</b>	No data available	None known

### Other Information

<b>Softening Point</b>	No data available
<b>VOC Content (%)</b>	No data available
<b>Particle Size</b>	No data available
<b>Particle Size Distribution</b>	

## 10. Stability and Reactivity

### Reactivity

No data available.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Hazardous Polymerization

Hazardous polymerization does not occur.

### Conditions to avoid

Excessive heat. Heat, flames and sparks.

### Incompatible materials

None known based on information supplied.

### Hazardous Decomposition Products

Carbon oxides.

## 11. Toxicological Information

### Information on likely routes of exposure

Product Information





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- Inhalation** Specific test data for the substance or mixture is not available. Toxic by inhalation. (based on components).
- Eye Contact** Specific test data for the substance or mixture is not available.
- Skin Contact** Specific test data for the substance or mixture is not available. Toxic in contact with skin. May be absorbed through the skin in harmful amounts. (based on components).
- Ingestion** Specific test data for the substance or mixture is not available. May be harmful if swallowed. (based on components).

## Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl alcohol 67-56-1	= 5628 mg/kg ( Rat )	-	= 83.2 mg/L ( Rat ) 4 h

## Information on toxicological effects

**Symptoms** Coughing and/ or wheezing. Difficulty in breathing.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization** No information available.

**Mutagenic Effects** No information available.

**Carcinogenicity** Contains no ingredient listed as a carcinogen.

**Reproductive Toxicity** No information available.

**STOT - single exposure** Based on classification criteria from the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200), this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. Detailed substance and/or ingredient information may be provided in other sections of this SDS. Target organs effects listed in this document may result from a single overexposure to this product. Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

**STOT - repeated exposure** No information available.

**Chronic Toxicity** No known effect based on information supplied. Effects from this product caused by acute exposure may cause permanent damage to target organs and/or may cause chronic conditions.



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**Target Organ Effects** Respiratory system. Systemic Toxicity. Central Nervous System (CNS). Eyes. Gastrointestinal tract (GI). Skin.

**Aspiration Hazard** No information available.

## Numerical measures of toxicity Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 323.00 mg/kg  
ATEmix (dermal) 968.00 mg/kg (ATE)  
ATEmix (inhalation-dust/mist) 1.62 mg/l  
ATEmix (inhalation-vapor) 10.00 ATEmix

## 12. Ecological Information

### Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Methyl alcohol 67-56-1		96h LC50: = 28200 mg/L (Pimephales promelas) 96h LC50: > 100 mg/L (Pimephales promelas) 96h LC50: 19500 - 20700 mg/L (Oncorhynchus mykiss) 96h LC50: 18 - 20 mL/L (Oncorhynchus mykiss) 96h LC50: 13500 - 17600 mg/L (Lepomis macrochirus)	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	

### Persistence and Degradability

No information available.

### Bioaccumulation

Chemical Name	Log Pow
Methyl alcohol 67-56-1	-0.77

### Other adverse effects

No information available.



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## 13. Disposal Considerations

### Waste treatment methods

**Disposal methods** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated Packaging** Dispose of contents/containers in accordance with local regulations.

**US EPA Waste Number** D001 U154

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl alcohol 67-56-1		Included in waste stream: F039		U154

**California Hazardous Waste Codes** 212

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Methyl alcohol 67-56-1	Toxic Ignitable

## 14. Transport Information

### DOT

**Proper Shipping Name** CONSUMER COMMODITY  
**Hazard Class** ORM-D  
**Description** CONSUMER COMMODITY, ORM-D  
**Emergency Response Guide Number** 128

### TDG

**UN-No.** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Hazard Class** 3  
**Packing Group** III  
**Description** UN1993, FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL ), 3, III

### MEX

**UN-No.** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Hazard Class** 3  
**Packing Group** III  
**Description** UN1993 FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL ), 3, III



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## ICAO

**UN-No.** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Hazard Class** 3  
**Packing Group** III  
**Description** UN1993, FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL ), 3, III

## IATA

**UN-No.** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Hazard Class** 3  
**Packing Group** III  
**Description** UN1993, FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL ), 3, III

## IMDG/IMO

**UN-No.** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Hazard Class** 3  
**Packing Group** III  
**EmS-No.** F-E, S-E  
**Description** UN1993, FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL ), 3, III, FP 34C

## RID

**UN-No.** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Hazard Class** 3  
**Packing Group** III  
**Classification code** F1  
**Description** UN1993 FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL ), 3, III

## ADR

**UN-No.** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Hazard Class** 3  
**Packing Group** III  
**Classification code** F1  
**Description** UN1993 FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL ), 3, III

## ADN

**UN-No.** UN1993  
**Proper Shipping Name** FLAMMABLE LIQUID, N.O.S.  
**Hazard Class** 3  
**Packing Group** III  
**Classification code** F1  
**Special Provisions** 274, 601, 640E  
**Description** UN1993 FLAMMABLE LIQUID, N.O.S.(METHYL ALCOHOL ), 3, III  
**Hazard Labels** 3



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Limited Quantity 5 L  
Ventilation VE01

## 15. Regulatory Information

### International Inventories

TSCA Complies  
DSL All components are listed either on the DSL or NDSL.

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Methyl alcohol - 67-56-1	67-56-1	30 - 40	1.0

#### SARA 311/312 Hazard Categories

Acute Health Hazard Yes  
Chronic Health Hazard Yes  
Fire Hazard Yes  
Sudden release of pressure hazard No  
Reactive Hazard No

#### CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Methyl alcohol 67-56-1	5000 lb		RQ= 2270 kg final RQ RQ= 5000 lb final RQ



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## US State Regulations

### California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Methyl alcohol - 67-56-1	Developmental

## US State Right-to-know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island	Illinois
Methyl alcohol 67-56-1	X	X	X	X	X

## International Regulations

### **Mexico**

#### **National occupational exposure limits**

Component	Carcinogen Status	Exposure Limits
Methyl alcohol 67-56-1 ( 15 - 40 )		Mexico: TWA= 200 ppm Mexico: TWA= 260 mg/m <sup>3</sup> Mexico: STEL= 250 ppm Mexico: STEL= 310 mg/m <sup>3</sup>

*Mexico - Occupational Exposure Limits - Carcinogens*

### **Canada**

#### **WHMIS Hazard Class**

B2 - Flammable liquid

D2A - Very toxic materials

D2B - Toxic materials



## 16. Other Information



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**NFPA**    **Health Hazards 3**    **Flammability 3**    **Instability 0**    **Physical and Chemical**

**HMIS**    **Health Hazards 3\***    **Flammability 3**    **Physical Hazard 0**    **Personal Protection X**

Prepared By:            Randy Boitz

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**



# Safety Data Sheet

**IDQ Operating, Inc.**  
44 Old Ridgebury Road  
Suite 300  
Danbury, CT 06810  
Tel. 1-203-205-2900

## 1. Product And Company Identification

**Product Name:** IDQ ACP-102

**Responsible Party:** IDQ Operating, Inc.  
44 Old Ridgebury Road  
Suite 300  
Danbury, CT 06810

**Information Phone Number:** +1 203-205-2900

**Emergency Phone Number:**

For Medical Emergencies, call 1-866-949-6465 / +1 303-389-1332 (Outside US and Canada)  
For Transportation Emergencies, call 1-800-424-9300 (Chemtrec) +1-703-527-3887 for  
Outside US and Canada (call collect)

**SDS Date Of Preparation:** 05/25/2015

**Product Use and Uses Advised Against:** Automotive maintenance product – For consumer and professional use

## 2. Hazards Identification

Note: This product is a consumer product and is labeled in accordance with the Consumer Product Safety Commission regulations and not OSHA regulations. The requirements for the labeling of consumer products take precedence over OSHA labeling so the actual product label will not contain the OSHA label elements shown below on this SDS.

**GHS Classification:**

<b>Physical:</b> Gases Under Pressure: Compressed Gas	<b>Health:</b> Skin Irritant Category 2 Reproductive Toxicity Category 1B Carcinogen Category 1B Simple Asphyxiant
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**GHS Label Elements:**



**Danger!**

Statements of Hazard	Prevention
Contains gas under pressure; may explode if heated. Causes skin irritation. May damage fertility or the unborn child. May cause cancer. Simple Asphyxiant: May displace oxygen and cause	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Wear protective gloves. IF ON SKIN: Wash with plenty of soap and water.





Safety Data Sheet

IDQ Operating, Inc.
44 Old Ridgebury Road
Suite 300
Danbury, CT 06810
Tel. 1-203-205-2900

rapid suffocation.

If skin irritation occurs: Get medical attention.
Take off contaminated clothing and wash it before reuse.
IF exposed or concerned: Get medical attention.
Store locked up.
Protect from sunlight. Do not exposure to temperatures
exceeding 50°C / 122°F.
Dispose of contents and container in accordance with
local and national regulations.

3. Composition/Information On Ingredients

Table with 3 columns: Component, CAS No., Amount. Rows include 1,1,1,2-tetrafluoroethane, Polyalkylene glycol monobutyl ether, Additive Package, Oil Additive, and Methylene chloride.

The exact concentrations are a trade secret.

4. First Aid Measures

Inhalation: If symptoms of exposure develop, remove to fresh air. Seek medical attention if breathing problem or irritation persists.

Skin Contact: Wash exposed skin with soap and water. If skin irritation or redness develops, seek medical attention.

Eye Contact: Flush eyes with large amounts of water for several minutes. If irritation or other symptoms develop, seek medical attention.

Ingestion: Ingestion is an unlikely route exposure for aerosol products.

Most Important Symptoms: May cause mild eye irritation. Mists may cause mild respiratory irritation. Exposure to high concentrations can induce anesthetic effects progressing from dizziness, weakness, nausea, to unconsciousness. Causes skin irritation. May damage fertility or the unborn child. May cause cancer.

Indication of Immediate Medical Attention/Special Treatment: None known.

5. Firefighting Measures

Suitable (and Unsuitable) Extinguishing Media: Use extinguishing media suitable for surrounding fire. Cool fire exposed containers with water.

Specific Hazards Arising from the Chemical: Contents under pressure. Exposure of containers to heat and flames can cause them to rupture often with violent force. Burning may produce oxides of carbon and fluoride; and hydrogen fluoride.

Special Fire Fighting Procedures: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against



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**IDQ Operating, Inc.**  
44 Old Ridgebury Road  
Suite 300  
Danbury, CT 06810  
Tel. 1-203-205-2900

bursting cans.

## 6: Accidental Release Measures

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Ventilate the area. Wear appropriate protective clothing and equipment.

**Methods and Materials for Containment and Clean-Up:** Place leaking can in a pail in a well-ventilated area until pressure has dissipated. Collect residual liquid using inert absorbents and place into a suitable container for disposal.

**Environmental Precautions:** Report release as required by local and national regulations.

## 7. Handling and Storage

**Precautions for Safe Handling:** Avoid contact with eyes and skin. Avoid breathing aerosol or gas. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Contents under pressure, do not puncture or incinerate containers. Refer to OSHA 1910.1052 (methylene chloride standard) for additional requirements.

**Conditions for Safe Storage, Including any Incompatibilities:** Store in a cool, well-ventilated area, away from incompatible materials. Do not store in direct sunlight or above 120°F.

## 8. Exposure Controls / Personal Protection

### Exposure Guidelines:

CHEMICAL	EXPOSURE LIMIT
1,1,1,2-tetrafluoroethane	1000 ppm TWA AIHA WEELs
Polyalkylene glycol monobutyl ether	None established
Additive Package	None established
Oil Additive	None established
Methylene chloride	50 ppm TWA ACGIH TLV 25 ppm TWA, 125 STEL OSHA PEL

**Appropriate Engineering Controls:** General ventilation should be adequate for normal use. For operations where the exposure limits may be exceeded, forced ventilation such as local exhaust may be needed to maintain exposures below applicable limits.

### Personal Protective Equipment

**Respiratory Protection:** None under normal use conditions. For operations where the exposure limits may be exceeded, a NIOSH approved supplied air respirators recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134 and 1910.1052; all applicable laws and regulations; and good industrial hygiene practice.

**Gloves:** Wear impervious gloves to avoid skin contact.

**Eye Protection:** Safety glasses are recommended if eye contact is possible.



# Safety Data Sheet

**IDQ Operating, Inc.**  
44 Old Ridgebury Road  
Suite 300  
Danbury, CT 06810  
Tel. 1-203-205-2900

**Other Protective Equipment/Clothing:** None required.

## 9. Physical and Chemical Properties

**Appearance And Odor:** Light amber liquid in aerosol can with ethereal odor.

<b>Physical State:</b> Liquid-based aerosol	<b>Odor Threshold:</b> Not available
<b>pH:</b> < 7	<b>Specific Gravity:</b> Not determined
<b>Initial Boiling Point/Range:</b> -26.5°C @ 736 mm Hg (1,1,1,2-tetrafluoroethane)	<b>Vapor Pressure:</b> 4277 mm Hg at 20°C
<b>Melting/Freezing Point:</b> -15.7 °F (<-26.5°C)	<b>Vapor Density:</b> (Air = 1) 3.5
<b>Solubility In Water:</b> Water solubility <15%	<b>Percent Volatile:</b> 86%
<b>Viscosity:</b> Not determined	<b>Evaporation Rate:</b> >1
<b>Decomposition Temperature:</b> Not available	<b>VOC Content:</b> Not determined
<b>Coefficient Of Water/Oil Distribution:</b> Not determined	<b>Autoignition Temp:</b> 752°F (>400°C)
<b>Flash Point:</b> Non-Flammable	<b>Flame extension:</b> Not determined
<b>Flammability Limits:</b> LEL: Not determined UEL: Not determined	<b>Flammability (solid, gas):</b> Not applicable

## 10. Stability and Reactivity

**Reactivity:** Not normally reactive

**Chemical Stability:** Stable under normal storage and handling conditions

**Conditions to Avoid:** Keep away from excessive heat, and open flames. Containers may rupture at temperatures > 120°F (48.8°C)

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** Burning may produce oxides of carbon and fluoride; and hydrogen fluoride.

## 11. Toxicological Information

### Potential Health Effects:

#### **Acute Hazards:**

**Inhalation:** Mist can irritate the throat and respiratory tract. Exposure to high concentrations can induce anesthetic effects progressing from dizziness, weakness, nausea, to unconsciousness.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Direct contact may cause mild eye irritation with redness, and tearing.

**Ingestion:** Ingestion is an unlikely route exposure for aerosol products. Swallowing may cause gastrointestinal disturbances.

**Chronic Effects:** Oil additive contains components that may damage fertility or the unborn child.



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**Carcinogenicity Listing:** Contains methylene chloride which is classified as an OSHA carcinogen, ACGIH - Confirmed animal carcinogen with unknown relevance to humans, NTP - Reasonably anticipated to be a human carcinogen, and IARC 2B - Possibly carcinogenic to humans. None of the other components listed at 0.1% or greater is a carcinogen or potential carcinogen by IARC, NTP, ACGIH or OSHA

### Numerical Measures of Toxicity:

1,1,1,2-tetrafluoroethane:	LC50 Inhalation Rat: >500,000/4h
Polyalkylene glycol monobutyl ether:	Not acutely toxic.
Additive Package:	LD50 Oral Rat > 5,000 mg/kg
	LD50 Dermal Rabbit > 10,000 mg/kg
Oil Additive:	LD50 Oral Rat 5,140 mg/kg
Methylene Chloride:	LD50 Oral Rat >2,000 mg/kg
	LD50 Dermal Rat >2,000 mg/kg

## 12. Ecological Information

**Ecotoxicity:** No ecotoxicity data is currently available for product.

**Persistence and Degradability:** No data available for product.

**Bio accumulative Potential:** No data available for product.  
Will not bio concentrate in fish and aquatic organisms.

**Mobility in Soil:** No data available for product. If released to soil, 1,1,1,2-tetrafluoroethane will rapidly volatilize from either moist or dry soil to the atmosphere. It will display moderate to high mobility in soil.

**Other Adverse Effects:** Products of decomposition will be highly dispersed and hence will have a very low concentration. It is not a significant contributor to photochemical smog and is not considered to be a VOC. It is not considered as an ozone depleting chemical.

## 13. Disposal Considerations

Dispose of in accordance with all local, state/provincial and federal regulations. Offer empty containers for recycling.

## 14. Transport Information

### **DOT Hazardous Materials Description:**

**Proper Shipping Name:** CONSUMER COMMODITY  
**Hazard Class:** ORM-D  
**Identification Number:** NA

## 15. Regulatory Information

### United States:

**EPA TSCA INVENTORY:** All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.



## Safety Data Sheet

### IDQ Operating, Inc.

44 Old Ridgebury Road  
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**CERCLA Section 103:** Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based on the RQ for Methylene Chloride (<1% maximum) of 1,000 lbs., is 100000 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**SARA Hazard Category (311/312):** Sudden Release of Pressure, Acute Health, Chronic Health

**SARA 313:** This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): Methylene Chloride CAS# 75-09-2 at < 1%

### 16. Other Information

NFPA Rating (NFPA 704):	Health: 1	Fire: 0	Instability: 0
HMIS Rating:	Health: 1*	Fire: 0	Physical Hazard: 0

REVISION SUMMARY: New SDS

DATA SUPPLIED IS FOR USE ONLY IN CONNECTION WITH OCCUPATIONAL SAFETY AND HEALTH



# SAFETY DATA SHEET

AC-0; AC-1; AC-2; AC-2A; AC-3; AC-4

## Section 1. Identification

**GHS product identifier** : AC-0; AC-1; AC-2; AC-2A; AC-3; AC-4

**Other means of identification** : Not available.

**Product type** : Liquid.

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Petroleum lubricating oil

**Area of application** : Industrial applications.

**Supplier/Manufacturer** : LUBRIPLATE® Lubricants Co.  
129 Lockwood St.  
Newark, NJ 07105  
Telephone no.: 1-973-589-9150

**e-mail address of person responsible for this SDS** : SDS@lubriplate.com

**Emergency telephone number (with hours of operation)** : CHEM-TEL 1-800-255-3924 (24 hour)

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : Not classified.

### GHS label elements

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

### Precautionary statements

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Supplemental label elements** : Avoid contact with skin and clothing. Wash thoroughly after handling.

**Hazards not otherwise classified** : Prolonged or repeated contact may dry skin and cause irritation.

**Date of issue/Date of revision** : 04/30/2015 **Date of previous issue** : No previous validation **Version** : 1 1/11

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : Not applicable.  
**Product code** : Not available.

Ingredient name	Other names	%	CAS number
Distillates (petroleum), hydrotreated heavy paraffinic	Distillates (petroleum), hydrotreated heavy paraffinic	60-100	64742-54-7
Distillates (petroleum), hydrotreated light paraffinic	Distillates (petroleum), hydrotreated light paraffinic	60-100	64742-55-8
Residual oils (petroleum), solvent-dewaxed	Residual oils (petroleum), solvent-dewaxed	30-60	64742-62-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.  
**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 dryness  
 cracking

## Section 4. First aid measures

**Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.



## Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy paraffinic	<p><b>ACGIH TLV (United States, 4/2014).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction</p> <p><b>NIOSH REL (United States, 10/2013).</b> TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist</p> <p><b>OSHA PEL (United States, 2/2013).</b> TWA: 5 mg/m<sup>3</sup> 8 hours.</p>
Distillates (petroleum), hydrotreated light paraffinic	<p><b>ACGIH TLV (United States, 4/2014).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction</p> <p><b>NIOSH REL (United States, 10/2013).</b> TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist</p> <p><b>OSHA PEL (United States, 2/2013).</b> TWA: 5 mg/m<sup>3</sup> 8 hours.</p>
Residual oils (petroleum), solvent-dewaxed	<p><b>ACGIH TLV (United States, 4/2014).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction</p> <p><b>NIOSH REL (United States, 10/2013).</b> TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist</p> <p><b>OSHA PEL (United States, 2/2013).</b></p>

## Section 8. Exposure controls/personal protection

TWA: 5 mg/m<sup>3</sup> 8 hours.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Oily liquid.]
- Color** : Amber.
- Odor** : Mineral oil.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : >288°C (>550.4°F)
- Flash point** : Open cup: 218 to 263°C (424.4 to 505.4°F) [Cleveland.]
- Evaporation rate** : <0.01 (butyl acetate = 1)
- Flammability (solid, gas)** : Not applicable.
- Lower and upper explosive (flammable) limits** : Lower: 0.9%  
Upper: 7%

## Section 9. Physical and chemical properties

<b>Vapor pressure</b>	: <0.0013 kPa (<0.01 mm Hg) [room temperature]
<b>Vapor density</b>	: >5 [Air = 1]
<b>Relative density</b>	: 0.86 to 0.87 [Water = 1]
<b>Solubility</b>	: Insoluble in the following materials: cold water and hot water.
<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: 238 to 289°C (460.4 to 552.2°F)
<b>Decomposition temperature</b>	: Not available.
<b>SADT</b>	: Not available.
<b>Viscosity</b>	: Kinematic (40°C (104°F)): 0.2907 to 2.05 cm <sup>2</sup> /s (29.07 to 205 cSt)
<b>Physical/chemical properties comments</b>	: Kinematic viscosity (100 °C (212 °F)): 136.6 to 430 SUS (5.30 to 18 cSt) Viscosity Index: 101 to 116 Pour point, °C (°F): -18 to -37 (0 to -35)

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.  Under normal conditions of storage and use, hazardous polymerization will not occur.
<b>Conditions to avoid</b>	: No specific data.
<b>Incompatible materials</b>	: Reactive or incompatible with the following materials: oxidizing materials.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Not available.

#### Irritation/Corrosion

Not available.

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

## Section 11. Toxicological information

**Conclusion/Summary** : The mineral oils in the product contain < 3% DMSO extract (IP 346).

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated heavy paraffinic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light paraffinic	ASPIRATION HAZARD - Category 1
Residual oils (petroleum), solvent-dewaxed	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.

**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking

**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

## Section 11. Toxicological information

- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Residual oils (petroleum), solvent-dewaxed	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	6 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Residual oils (petroleum), solvent-dewaxed	-	-	Not readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Distillates (petroleum), hydrotreated light paraffinic	>2	-	low

### Mobility in soil

- Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

- Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) PAIR:** Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 307:** zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate); Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

## Section 15. Regulatory information

**Clean Air Act Section 602** : Not listed

### Class II Substances

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), hydrotreated heavy paraffinic	60-100	No.	No.	No.	Yes.	No.
Distillates (petroleum), hydrotreated light paraffinic	60-100	No.	No.	No.	Yes.	No.
Residual oils (petroleum), solvent-dewaxed	30-60	No.	No.	No.	Yes.	No.

### SARA 313

Not applicable.

### State regulations

**Massachusetts** : The following components are listed: MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT PARAFFINIC

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL; MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL; MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL

**Pennsylvania** : None of the components are listed.

### California Prop. 65

None of the components are listed.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	*	1
Flammability		1
Physical hazards		0

## Section 16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### [National Fire Protection Association \(U.S.A.\)](#)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### [History](#)

<b>Date of issue/Date of revision</b>	: 04/30/2015
<b>Date of previous issue</b>	: No previous validation
<b>Version</b>	: 1
<b>Prepared by</b>	: IHS
<b>Key to abbreviations</b>	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations
<b>References</b>	: HCS (U.S.A.)- Hazard Communication Standard International transport regulations

✓ Indicates information that has changed from previously issued version.

### [Notice to reader](#)

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



**SAFETY DATA SHEET**

**1. Product And Company Identification**

SDS ID: SDS503  
 PRODUCT NAME: Custom Brand Antifreeze/Coolant  
 PRODUCT NUMBER: Service Pro 16705, Custom Brand AF/C, Prime, Celsius, 88862158, 88862159, 88862160, 88862161, 88862162, 4119AN, 88862638, 2-90209-061, MJA0X3, PR3000-55, LORDAFC, 2-90209-061-ARG, NZ956KG, BEST, 12378560/F, 12378561/F, Oreilly6-1/1F, Spectrum/F, 000367, 000367/F, RAFBCAL, ANT301, ANT355.  
 FORMULA NUMBER: YA-956G, YA-956G-B, YA-956CB, YA-956KG, YA-956CB-ED, YA956CB-B, YA-956KG-B, YA-956CB-ED-B

MANUFACTURER:  
Prestone Products Corporation  
Danbury, CT 06810-5109

CANADIAN OFFICE:  
FRAM Group (Canada), Inc.  
Mississauga, Ontario L5L 3S6

**MEDICAL EMERGENCIES AND ALL OTHER INFORMATION PHONE NUMBER:**

(800)890-2075 (in the US)

(800)668-9349 (in Canada)

**TRANSPORTATION EMERGENCY PHONE NUMBER (Chemical Spills and Transport Accidents only):**

CHEMTREC 1-800-424-9300 (in the US)

CANUTEC (613)996-6666 (in Canada)

SDS DATE OF PREPARATION/REVISION: 09/20/13

PRODUCT USE: Automobile Antifreeze – consumer product

RESTRICTIONS ON USE: None identified

**2. Hazards Identification**

**GHS/HAZCOM 2012 Classification:**

Health	Physical
Acute Toxicity Category 4 Specific Target Organ Toxicity – repeated exposure Category 2 Reproductive Toxicity Category 2	Not Hazardous

**Label Elements**



**WARNING!**

H302 Harmful if swallowed.

H361d Suspected of damaging the unborn child.

H373 May cause damage to kidneys through prolonged or repeated exposure.

**Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe mist or vapors.  
 P264 Wash exposed skin thoroughly after handling.  
 P270 Do not eat, drink, or smoke when using this product.  
 P281 Use personal protective equipment as required.

**Response:**  
 P301 + P312 IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.  
 P330 Rinse mouth.  
 P308 + P313 IF exposed or concerned: Get medical advice.

**Disposal:**  
 P405 Store locked up.  
 P501 Dispose of contents and container in accordance with local and national regulations.

**3. Composition/Information on Ingredients**

Component	CAS No.	Amount
Ethylene Glycol	107-21-1	80-95
2-Ethyl Hexanoic Acid, Sodium Salt	19766-89-3	1-5
Neodecanoic Acid, Sodium Salt	31548-27-3	1-5
Diethylene Glycol	111-46-6	0-5

The exact concentrations are a trade secret.

**4. First Aid Measures**

**INHALATION:** Remove the victim to fresh air. If breathing has stopped administer artificial respiration. If breathing is difficult, have medical personnel administer oxygen. Get medical attention.

**SKIN CONTACT:** Remove contaminated clothing. Immediately wash contacted area thoroughly with soap and water. If irritation persists, get medical attention.

**EYE CONTACT:** Immediately flush eyes with large amounts of water for 15 minutes. Get medical attention if irritation persists.

**INGESTION:** Seek immediate medical attention. Immediately call local poison control center or go to an emergency department. Never give anything by mouth to or induce vomiting in an unconscious or drowsy person.

**MOST IMPORTANT SYMPTOMS:** May cause eye irritation. Inhalation of mists may cause nose and throat irritation and nervous system effects. Ingestion may cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED:** Seek immediate medical attention for large ingestions.

**NOTES TO PHYSICIAN:** The principal toxic effects of ethylene glycol, when swallowed, are kidney damage and metabolic acidosis. The combination of metabolic acidosis, an osmol gap and oxalate crystals in the urine is evidence of ethylene glycol poisoning. Pulmonary edema with hypoxemia has been described in a number of patients following poisoning with ethylene glycol. Respiratory support with mechanical ventilation may be required. There may be cranial nerve involvement in the late stages of toxicity from swallowed ethylene glycol. In particular, effects have been reported involving the seventh, eighth, and ninth cranial nerves, presenting with bilateral facial paralysis, diminished hearing and dysphagia.

Ethanol is antidotal and its early administration may block the formation of nephrotoxic metabolites of ethylene glycol in the liver. The objective is to rapidly achieve and maintain a blood ethanol level of approximately 100 mg/dl by giving a loading dose of ethanol followed by a maintenance dose. Intravenous administration of ethanol is the preferred route. Ethanol blood levels should be checked frequently. Hemodialysis may be required. 4-Methyl pyrazole (Fomepizole®), a potent inhibitor of alcohol dehydrogenase, has been used therapeutically to decrease the metabolic consequences of ethylene glycol poisoning. Fomepizole® is easier to use clinically than ethanol, does not cause CNS depression or hypoglycemia and requires less monitoring than ethanol. Additional therapeutic modalities which may decrease the adverse consequences of ethylene glycol metabolism are the administration of both thiamine and pyridoxine. As there are complicated and serious overdoses, we recommend you consult with the toxicologists at your poison control center.

#### 5. Firefighting Measures

**SUITABLE EXTINGUISHING MEDIA:** For large fires, use alcohol type or all-purpose foams. For small fires, use water spray, carbon dioxide or dry chemical.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:** A solid stream of water or foam directed into hot, burning liquid can cause frothing. Burning may produce carbon monoxide and carbon dioxide.

**SPECIAL FIRE FIGHTING PROCEDURES:** Do not spray pool fires directly. Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

#### 6: Accidental Release Measures

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Wear appropriate protective clothing and equipment (See Section 8).

**METHODS AND MATERIALS FOR CONTAINMENT/CLEANUP:** Collect with absorbent material and place in appropriate, labeled container for disposal or, if permitted flush spill area with water.

#### 7. Handling and Storage

**PRECAUTIONS FOR SAFE HANDLING:**

Harmful or Fatal if Swallowed. Do not drink antifreeze or solution. Avoid eye and prolonged or repeated skin contact. Avoid breathing vapors or mists. Wash exposed skin thoroughly with soap and water after use. Do not store in opened or unlabeled containers. Keep container away from open flames and excessive heat. Do not reuse empty containers unless properly cleaned. Empty containers retain product residue and may be dangerous. Do not cut, weld, drill, etc. containers, even empty.

Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without any obvious ignition sources. Published "autoignition" or "ignition" temperatures cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Use of this product in elevated temperature applications should be thoroughly evaluated to assure safe operating conditions.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:** Store away from excessive heat and oxidizers.

**NFPA CLASSIFICATION:** III B

#### 8. Exposure Controls / Personal Protection

**EXPOSURE GUIDELINES**

CHEMICAL	EXPOSURE LIMIT
Ethylene Glycol (as aerosol)	100 mg/m <sup>3</sup> Ceiling ACGIH TLV
Diethylene Glycol	10 mg/m <sup>3</sup> TWA AIHA WEEL
2-Ethyl Hexanoic Acid	None Established
Neodacanoic Acid, Sodium Salt	None Established

**APPROPRIATE ENGINEERING CONTROLS:** Use general ventilation or local exhaust as required to maintain exposures below the occupational exposure limits.

**RESPIRATORY PROTECTION:** For operations where the TLV is exceeded a NIOSH approved respirator with organic vapor cartridges and dust/mist prefilters or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select and use in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

**GLOVES:** Chemical resistant gloves such as neoprene or PVC where contact is possible.

**EYE PROTECTION:** Splash-proof goggles.

**OTHER PROTECTIVE EQUIPMENT/CLOTHING:** Appropriate protective clothing as needed to minimize skin contact.

**9. Physical and Chemical Properties**

APPEARANCE:	Green or Yellow liquid	ODOR:	Characteristic odor
ODOR THRESHOLD:	Not determined	pH:	8.7-9.2
MELTING/FREEZING POINT:	-36°F (-38°C)	BOILING POINT/RANGE:	340°F (171°C)
FLASH POINT:	> 254°F (>123°C) TOC > 230°F (>110°C) Setaflash	EVAPORATION RATE:	Not determined
FLAMMABILITY (SOLID, GAS)	Not Applicable	FLAMMABILITY LIMITS:	LEL: Not determined UEL: Not determined
VAPOR PRESSURE:	Not determined	VAPOR DENSITY:	Not determined
RELATIVE DENSITY:	1.07-1.14	SOLUBILITIES	Water: 100 %
PARTITION COEFFICIENT (n-octanol/water)	Not determined	AUTOIGNITION TEMPERATURE:	Not determined
DECOMPOSITION TEMPERATURE:	Not determined	VISCOSITY:	Not determined

**10. Stability and Reactivity**

**REACTIVITY:** Normally unreactive

**CHEMICAL STABILITY:** Stable

**POSSIBILITY OF HAZARDOUS REACTIONS:** Reaction with strong oxidizers will generate heat.

**CONDITIONS TO AVOID:** None known

**INCOMPATIBLE MATERIALS:** Avoid strong bases at high temperatures, strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide.

## 11. Toxicological Information

### POTENTIAL HEALTH EFFECTS:

#### ACUTE HAZARDS:

**INHALATION:** May cause irritation of the nose and throat with headache, particularly from mists. High vapor concentrations caused, for example, by heating the material in an enclosed and poorly ventilated workplace, may produce nausea, vomiting, headache, dizziness and irregular eye movements.

**SKIN CONTACT:** No evidence of adverse effects from available information.

**EYE CONTACT:** Liquid, vapors or mist may cause discomfort in the eye with persistent conjunctivitis, seen as slight excess redness or conjunctiva. Serious corneal injury is not anticipated.

**INGESTION:** May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects, including irregular eye movements, convulsions and coma. Cardiac failure and pulmonary edema may develop. Severe kidney damage which may be fatal may follow the swallowing of ethylene glycol. A few reports have been published describing the development of weakness of the facial muscles, diminishing hearing, and difficulty with swallowing, during the late stages of severe poisoning.

**CHRONIC EFFECTS:** Prolonged or repeated inhalation exposure may produce signs of central nervous system involvement, particularly dizziness and jerking eye movements. Prolonged or repeated skin contact may cause skin sensitization and an associated dermatitis in some individuals. Ethylene glycol has been found to cause birth defects in laboratory animals. The significance of this finding to humans has not been determined. 2-Ethyl Hexanoic Acid, Sodium Salt is suspected of causing developmental effects based on animal data.

**CARCINOGENICITY LISTING:** None of the components of these products is listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA.

#### ACUTE TOXICITY VALUES:

Ethylene Glycol: LD50 Oral Rat: 4700 mg/kg  
LD50 Skin Rabbit: 9530 mg/kg

Diethylene Glycol: LD50 Oral Rat: 12,565 mg/kg  
LD50 Skin Rabbit: 11,890 mg/kg

**SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH:** Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. Also, in a preliminary study to assess the effects of exposure of pregnant rats and mice to aerosols at concentrations 150, 1,000 and 2,500 mg/m<sup>3</sup> for 6 hours a day throughout the period of organogenesis, teratogenic effects were produced at the highest concentrations, but only in mice. The conditions of these latter experiments did not allow a conclusion as to whether the developmental toxicity was mediated by inhalation of aerosol, percutaneous absorption of ethylene glycol from contaminated skin, or swallowing of ethylene glycol as a result of grooming the wetted coat. In a further study, comparing effects from high aerosol concentration by whole-body or nose-only exposure, it was shown that nose-only exposure resulted in maternal toxicity (1,000 and 2,500 mg/m<sup>3</sup>) and developmental toxicity in with minimal evidence of teratogenicity (2,500 mg/m<sup>3</sup>). The no-effects concentration (based on maternal toxicity) was 500 mg/m<sup>3</sup>. In a further study in mice, no teratogenic effects could be produced when ethylene glycol was applied to the skin of pregnant mice over the period of organogenesis. The above observations suggest that ethylene glycol is to be regarded as an animal teratogen; there is currently no available information to suggest that ethylene glycol caused birth defects in humans. Cutaneous application of

ethylene glycol is ineffective in producing developmental toxicity; exposure to high aerosol concentration is only minimally effective in producing developmental toxicity; the major route for producing developmental toxicity is perorally.

Two chronic feeding studies, using rats and mice, have not produced any evidence that ethylene glycol causes dose-related increases in tumor incidence or a different pattern of tumors compared with untreated controls. The absence of carcinogenic potential for ethylene glycol has been supported by numerous invitro genotoxicity studies showing that it does not produce mutagenic or clastogenic effects.

This product contains less than 0.3% tolytriazole which has demonstrated mutagenic activity in a bacterial test system. A correlation has been established between mutagenic activity and carcinogenic activity for many chemicals. Tolytriazole has not been identified as a carcinogen or probable carcinogen by NTP, IARC, ACGIH, or OSHA.

In a study of Wistar rats, adverse developmental results were reported at a dose of 100 mg / kg of body weight for 2-Ethyl Hexanoic Acid, Sodium Salt.

## 12. Ecological Information

### ECOTOXICITY:

- Ethylene Glycol: LC50 Fathead Minnow <10,000 mg/L/96 hr.
- EC50 Daphnia Magna 100,000 mg/L/48 hr.
- Bacterial (*Pseudomonas putida*): 10,000 mg/l
- Protozoa (*Entosiphon sulcatum* and *Uronema parduczi*; Chatton-Lwoff): >10,000 mg/l
- Algae (*Microcystis aeruginosa*): 2,000 mg/l
- Green algae (*Scenedesmus quadricauda*): >10,000 mg/l
- Diethylene Glycol: LC50 western mosquitofish >32,000 mg/L/96 hr.

### PERSISTENCE AND DEGRADABILITY:

Ethylene Glycol is readily biodegradable (97-100% in 2-12 days). Diethylene glycol is readily biodegradable (>70% in 19days).

### BIOACCUMULATIVE POTENTIAL:

Ethylene glycol: A BCF of 10, reported for ethylene glycol in fish, Golden ide (*Leuciscus idus melanotus*), after 3 days of exposure suggests the potential for bio concentration in aquatic organisms is low.  
Diethylene glycol: An estimated BCF of 3 suggests the potential for bio concentration in aquatic organisms is low.

MOBILITY IN SOIL: Ethylene glycol and diethylene glycol are highly mobile in soil.

OTHER ADVERSE EFFECTS: None known

## 13. Disposal Considerations

Dispose of product in accordance with all local, state/provincial and federal regulations.

## 14. Transport Information

U.S. DOT HAZARD CLASSIFICATION: Not Regulated (unless package contains a reportable quantity)

Note: IF A SHIPMENT OF A REPORTABLE QUANTITY (5,263 LBS/553 GAL.) IN A SINGLE PACKAGE IS INVOLVED, THE FOLLOWING INFORMATION APPLIES:

PROPER SHIPPING NAME: RQ, Environmentally hazardous substance, liquid, n.o.s. (Ethylene glycol)

UN NUMBER: UN3082  
PACKING GROUP: III  
LABELS REQUIRED: Class 9

DOT MARINE POLLUTANTS: This product does not contain Marine Pollutants as defined in 49 CFR 171.8.

IMDG CODE SHIPPING CLASSIFICATION: Not Regulated

CANADIAN TDG CLASSIFICATION: Not Regulated

### 15. Regulatory Information

EPA SARA 311/312 HAZARD CLASSIFICATION: Acute health, chronic health

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Ethylene Glycol	107-21-1	80-95%
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PROTECTION OF STRATOSPHERIC OZONE: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based on the RQ for Ethylene Glycol (95% maximum) of 5,000 lbs., is 5,263 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

CALIFORNIA PROPOSITION 65: The normal consumer use of this product does not result in exposures to chemicals known to the State of California to cause Cancer and/or Reproductive Harm above the significant risk level for carcinogens or the maximum allowable dose levels for reproductive toxins. Therefore, no warnings are required for consumer packages. Industrial or other occupational use of this product at higher frequency and using larger quantities of this product may result in exposures exceeding these levels and are labeled accordingly.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CANADIAN ENVIRONMENTAL PROTECTION ACT: All of the ingredients are listed on the Canadian Domestic Substances List.

CANADIAN WHMIS CLASSIFICATION: Class D - Division 2 - Subdivision A - (A very toxic material causing other toxic effects)



CANADIAN WHMIS HAZARD SYMBOLS:

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): All of the ingredients are listed on the EINECS inventory.

AUSTRALIA: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances.

JAPAN: All of the ingredients of this product are listed on the Japanese Existing and New Chemical Substances (METI) List.

KOREA: All of the ingredients of this product are listed on the Korean Existing Chemical List (KECL).

PHILIPPINES: All of the ingredients of this product are listed on the Philippine Inventory of Chemical and Chemical Substance (PICCS)

CHINA: All of the ingredients of this product are listed on the Inventory of Existing Chemical Substance in China (IECSC).

<b>16. Other Information</b>
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NFPA RATING (NFPA 704) - FIRE: 1      HEALTH: 2      INSTABILITY: 0

REVISION SUMMARY: All Sections – conversion to Hazcom 2012 classification and labeling and format.

SDS Date of Preparation/Revision: September 20, 2013

This SDS is directed to professional users and bulk handlers of the product. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations.

While Prestone Products Corporation believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Prestone Products Corporation assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

If more information is needed, please contact:      Prestone Products Corporation  
69 Eagle Road  
Danbury CT 06810  
(800) 890-2075



**KANO LABORATORIES, INC.  
SAFETY DATA SHEET**

**SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** AEROKROIL

**Product Use:** Penetrant/Lubricant for Industrial Use

**Manufacturer:** Kano Laboratories, Inc.  
1000 E. Thompson Lane  
Nashville, TN 37211

**Emergency Phone Number:** Chemtrec 1 (800) 424-9300

**Manufacturer Phone Number:** 615-833-4101

**Website:** www.kanolaboratories.com

**SDS Date of Preparation:** April 15, 2016

**SECTION 2: HAZARDS IDENTIFICATION**

**GHS / HAZCOM 2012 Classification:**

<b>Health</b>	<b>Physical</b>
Skin Irritation Category 2 Eye Irritation Category 2A Specific Target Organ Toxicity – Single Exposure Category 3 (Respiratory Irritation, CNS) Aspiration Hazard Category 1	Flammable Aerosol Category 2 Gas Under Pressure: Compressed Gas

Label Elements

**Danger!**



Flammable aerosol.

Contains gas under pressure; may explode if heated.

Causes skin irritation.

Causes serious eye irritation.

May be fatal if swallowed and enters airways.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Keep away from heat, sparks, open flames, and hot surfaces. No smoking.

Do not spray on an open flame or other ignition source.

Pressurized container. Do not pierce or burn, even after use.

Avoid breathing mist, vapors or spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves, eye protection and face protection.

IF SWALLOWED: Immediately call a POISON CENTER. Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical attention.

Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists: Get medical attention.

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER if you feel unwell.

In case of fire: Use carbon dioxide, dry chemical or foam to extinguish.

Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Store in a well-ventilated place.

Store locked up.

Dispose of contents and container in accordance with local and national regulations.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS#	%
Severely Hydrotreated Petroleum Distillates	64742-52-5	30-50
Light Petroleum Distillates	64742-95-6 64742-88-7 64742-47-8 64742-96-7	30-50
Proprietary Ingredients	Proprietary	1-10
Dipropylene Glycol Monopropyl Ether	29911-27-1	1-5
Diisobutyl Ketone	108-83-8	0-15
Dipropylene Glycol Methyl Ether	88917-22-0	0-5
Aliphatic Alcohol #1	123-42-2	<3
Aliphatic Alcohol #2	78-83-1	<3
Carbon Dioxide Propellant	124-38-9	1-15

**The specific identity and/or exact percentage has been withheld as a trade secret.**

**SECTION 4: FIRST AID MEASURES**

**Eye:** Rinse thoroughly with water for several holding the eye lids open to be sure the material is washed out. Get medical attention if irritation develops or persists.

**Skin:** Remove contaminated clothing. Wash contact area thoroughly with soap and water. Get medical attention if irritation or symptoms of exposure develop. Launder clothing before re-use.

**Inhalation:** Remove victim to fresh air. Give artificial respiration if needed. If breathing is difficult, oxygen should be administered by qualified personnel. Get medical attention if symptoms develop.

**Ingestion:** DO NOT induce vomiting. Keep the victim calm and warm. Never give anything by mouth to an unconscious or drowsy person. Get immediate medical attention.

**Most important symptoms and effects, acute and delayed:** May cause eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects such as headache, dizziness, nausea and vomiting. Harmful or fatal if swallowed. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

**Indication of immediate medical attention and special treatment, if needed:** If swallowed, get immediate medical attention.

**SECTION 5: FIRE FIGHTING MEASURES**

**Suitable (and Unsuitable) Extinguishing Media:** Use carbon dioxide, dry chemical or foam. Water may be ineffective but can be used to cool containers and structures.

**Specific Hazards Arising from the Chemical:** Contents under pressure. Keep away from heat and open flames. Container may rupture or explode in the heat of a fire. Prolonged exposure to temperatures above 120°F may cause cans to burst. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back.

Never use welding or cutting torch on or near containers (even empty) because product can ignite explosively. Combustion products may be hazardous: Oxides of carbon, organic compounds, smoke and fumes.

**Special Protective Equipment and Precautions for Fire-fighters:** Wear NIOSH approved positive pressure, self-contained breathing apparatus and full protective clothing. Cool fire exposed containers with water. Protect against bursting cans.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal precautions, Protective equipment, and Emergency procedures:** Wear appropriate protective clothing to prevent eye and skin contact including impervious gloves, safety goggles and respirator if needed.

**Environmental precautions:** Avoid release to the environment. Report spills and releases as required to appropriate authorities.

**Methods and Materials for Containment and Cleaning up:** Remove all ignition sources such as open flames, spark producing equipment, pilot lights, etc. Ventilate area. Cover with an inert absorbent material and collect into an appropriate container for disposal.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for Safe Handling:** Avoid breathing vapors, aerosols and mists. Use with adequate ventilation. Avoid contact with the eyes, skin and clothing. Wash exposed skin thoroughly with soap and water after use. Keep product away from heat, sparks, flames and all other sources of ignition. No smoking in storage or use areas. Do not cut, braze, solder, grind or weld on or near containers. Contents under pressure. Do not puncture or incinerate container.

**Conditions for Safe Storage, Including any Incompatibilities:** Store in a cool, well ventilated area at temperatures below 120°F. Do not store in direct sunlight. Store as a Level 3 aerosol.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

Chemical Name	Exposure Limits
Severely Hydrotreated Petroleum Distillates	5 mg/m <sup>3</sup> TWA OSHA PEL 5 mg/m <sup>3</sup> TWA ACGIH TLV (inhalable fraction)
Light Petroleum Distillates	500 ppm TWA OSHA PEL (As standard solvent) 200 ppm TWA ACGIH TLV (as kerosene)
Dipropylene Glycol Monopropyl Ether	None Established
Proprietary Ingredients	None Established
Diisobutyl Ketone	25 ppm TWA OSHA PEL 50 ppm TWA ACGIH TLV
Dipropylene Glycol Methyl Ether	None Established
Aliphatic Alcohol #1	50 ppm OSHA TWA PEL- 50 ppm TWA ACGIH TLV
Aliphatic Alcohol #2	100 ppm TWA OSHA PEL 50 ppm TWA ACGIH TLV
Carbon Dioxide Propellant	5000 ppm OSHA PEL-TWA 5000 ppm ACGIH TLV-TWA 30000 ppm ACGIH TLV-STEL

**Appropriate Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain concentrations below the occupational exposure limits. Use explosion proof electrical equipment and wiring where required.

**Personal Protective Equipment:**

**Respiratory Protection:** If the exposure limits listed above are exceeded, a NIOSH approved respirator with organic vapor cartridges may be used. For higher exposures, a supplied air respirator may be required. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**Hand protection:** Impervious gloves are recommended when needed to avoid skin contact. Based on available test data, 4H or Silver Shield gloves are suggested.

**Eye Protection:** Chemical safety goggles recommended.

**Skin Protection:** Impervious clothing as required to prevent skin contact and contamination of personal clothing.

**Hygiene measures:** Suitable eye wash and washing facilities should be available in the work area.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Slightly reddish liquid packaged as an aerosol	<b>Odor:</b>	Solvent
<b>Odor Threshold:</b>	Not available	<b>pH:</b>	Not available
<b>Melting/Freezing Point:</b>	Not available	<b>Boiling Point/Range:</b>	Not available
<b>Flash Point:</b>	132°F (55.5°C) TOC	<b>Evaporation Rate:</b>	Not available
<b>Flammability: (Solid, Gas)</b>	Not applicable	<b>Flammability Limits:</b>	10.9% (aliphatic alcohol #2) LEL: 0.7% (light petroleum distillates)
<b>Vapor Pressure:</b>	Not available	<b>Vapor Density:</b>	Not available
<b>Relative Density:</b>	0.8596	<b>Solubilities:</b>	Negligible in Water
<b>Partition Coefficient: (N-Octanol/Water)</b>	Not available	<b>Autoignition Temperature:</b>	Not available
<b>Decomposition Temperature:</b>	Not available	<b>Viscosity:</b>	Not available

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** None known.

**Chemical Stability:** Stable under normal conditions of storage or use.

**Possibility of Hazardous Reactions:** None known.

**Conditions to avoid:** Avoid heat, sparks, flames and all other sources of ignition.

**Incompatible Materials:** Avoid strong oxidizing agents, reducing agents, acids and bases.

**Hazardous decomposition products:** Combustion will produce oxides of carbon, acetone, acrid fumes and smoke.

### SECTION 11: TOXICOLOGICAL INFORMATION

**Potential Health Effects:**

**Eye:** May cause eye irritation with redness, tearing and stinging.

**Skin:** May cause irritation with redness, rash, swelling. Prolonged or repeated contact may result in defatting and dermatitis.

**Inhalation:** Inhalation of vapors or mists may cause mucous membrane and upper respiratory tract irritation and central nervous system depression. Symptoms may include coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea, fatigue and unconsciousness.

**Ingestion:** Ingestion is an unlikely route of exposure for aerosol products. Swallowing may cause gastrointestinal irritation with abdominal pain, nausea, vomiting and diarrhea and central nervous system depression with symptoms

including headache, dizziness, intoxication, weakness, nausea, and vomiting. Aspiration into the lungs during ingestion or vomiting may cause lung damage.

**Chronic Hazards:** Prolonged or repeated exposure may cause effects on the central nervous system, kidney and liver.

**Carcinogen Status:** None of the components of this product at greater than 0.1% are listed as carcinogens by OSHA, IARC or NTP.

**Acute toxicity:** Toxicological testing has not been performed on this product as a mixture.

Severely Hydrotreated Petroleum Distillates: Oral rat LD50 > 5000 mg/kg; Dermal rat LD50 > 5000 mg/kg  
Inhalation rat LC50 > 2.18 mg/L/4 hr.

Light Petroleum Distillates: Oral rat LD50 >5000 mg/kg, Inhalation rat LC50 >5.28 mg/L/4 hr, Dermal rabbit LD50 >2000 mg/kg

Proprietary Ingredients: Oral rat LD50 2760 mg/kg; Dermal rabbit LD50 >2000 mg/kg

Dipropylene Glycol Monopropyl Ether: Oral rat LD50 >2000 mg/kg Dermal rabbit LD50 >2000 mg/kg.

Diisobutyl Ketone: Oral rat LD50 5233 mg/kg; Dermal rat LD50 > 2000 mg/kg; Inhalation rat LC50 14.5 mg/L/4 hr.

Dipropylene Glycol Methyl Ether: Oral rat LD50 >5000 mg/kg, Dermal rat LD50 >2000 mg/kg, Inhalation rat LD50 >5.7 mg/L/4 hr

Aliphatic Alcohol #1: Oral rat LD50 3002 mg/kg; Dermal rat LD50 > 1875 mg/kg; Inhalation rat LC50 > 7.6 mg/L/4 hr.

Aliphatic Alcohol #2: Oral rat LD50 > 2830 mg/kg; Inhalation rat LC50 24.6 mg/L/4 hr.; Dermal rabbit LD50 > 2000 mg/kg

Carbon Dioxide: Inhalation rat LC50 167857 ppm/4 hr

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** No toxicity data available for the product.

Severely Hydrotreated Petroleum Distillates: 96 hr. LC50 Pimephales promelas > 100 mg/L; 48 hr. EC50 daphnia magna >1000 mg/L; 72 hr. EC50 Pseudokirchnerella subcapitata > 100 mg/L

Light Petroleum Distillates: 96 hr LL50 Oncorhynchus mykiss 2.5 mg/kg, 48 hr EL50 daphnia magna 1.4 mg/L, 72 hr EL50 Pseudokirchnerella subcapitata 1.3 mg/L

Proprietary Ingredients: 96 hr. LC50 Oncorhynchus mykiss 18350 ug/L

Dipropylene Glycol Monopropyl Ether: 96 hr LC50 Oncorhynchus mykiss >100 mg/L, 48 hr EC50 daphnia magna >100 mg/L, 96 hr EC50 Pseudokirchnerella subcapitata >1000 mg/L

Diisobutyl Ketone: 96 hr. LC50 Oncorhynchus mykiss 30 mg/L; 48 hr. EC50 daphnia magna 37.2 mg/L, 72 hr. EC50 Pseudokirchnerella subcapitata 46.9 mg/L

Dipropylene Glycol Methyl Ether: 96 hr LC50 Oncorhynchus mykiss 110.2 mg/L, 48 hr LC50 daphnia magna 2701 mg/L, 72 hr EC50 Pseudokirchnerella subcapitata >1000 mg/L

Aliphatic Alcohol #1: 96 hr. LC50 Oryzias latipes >100 mg/L; 48 hr. EC50 daphnia magna >1000 mg/L; 72 hr. EC50 Pseudokirchnerella subcapitata >1000 mg/L

96 hr LC50 Pimephales promelas 1430 mg/L; 48 hr EC50 daphnia pulex 1100 mg/L; 72 hr EC50 Pseudokirchnerella subcapitata 1799 mg/L

Carbon Dioxide: 96 hr LC50 Oncorhynchus mykiss 35 mg/L

**Persistence and Degradability:** Aliphatic alcohol #1 and aliphatic alcohol #2 are readily biodegradable. . Light petroleum distillates is not readily biodegradable. Severely hydrotreated petroleum distillates is inherently biodegradable based on structurally similar chemicals.

**Bioaccumulative Potential:** Aliphatic alcohol #1 has a calculated BCF of 0.5. Diisobutyl Ketone has a calculated BCF of 7. Aliphatic alcohol #2 has a calculated BCF of 3.

**Mobility in Soil:** Aliphatic alcohol #1, aliphatic alcohol #2 and diisobutyl ketone have a high to very high mobility in soil.

**Other Adverse Effects:** None known

**SECTION 13: DISPOSAL INFORMATION**

**Disposal instructions:** Dispose of product in accordance with all local, state/provincial and federal regulations.

**Contaminated packaging:** Offer empty packaging material to local recycling facilities.

**SECTION 14: TRANSPORT INFORMATION**

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
<b>DOT Ground</b>		Consumer Commodity ORM-D or Limited Quantity			
<b>DOT / 49 CFR</b>	UN1950	Aerosols, Flammable, Limited Quantity	2.1	None	None
<b>IMDG</b>	UN1950	Aerosols, Limited Quantity	2.1	None	None
<b>IATA</b>	UN1950	Aerosols, Flammable, Limited Quantity	2.1	None	None

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable – product is transported only in packaged form.

**Special precautions:** None known.

**SECTION 15: REGULATORY INFORMATION**

**U.S. FEDERAL REGULATIONS:**

**CERCLA 103 Reportable Quantity:** This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**SARA TITLE III:**

**Hazard Category for Section 311/312:** Acute Health, Fire Hazard, Sudden Release of Pressure

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements: None

**Section 302 Extremely Hazardous Substances (TPQ):** None

**EPA Toxic Substances Control Act (TSCA) Status:** All of the components of this product are listed on the TSCA inventory.

**SECTION 16: OTHER INFORMATION**

**HMIS Ratings:** Health - 2                      Flammability - 4                      Physical Hazard - 0

**NFPA Ratings:** Health - 1                      Flammability - 2                      Instability - 0

**SDS Revision History:** Section 3 Composition, Section 8 Exposure Limits, Section 11 Acute Toxicity, Section 12 Ecotoxicity

**Date of preparation:** April 15, 2016

**Date of last revision:** June 15, 2015

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The information contained herein has been developed based upon current available scientific data. New information may be developed from time to time which may render the conclusions of this report obsolete. Therefore, no warranty is extended as to the applicability of this information to the user's intended purpose or the consequences of its use or misuse.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Air Brake Anti-Freeze & Conditioner

**Other means of identification**

**Product code** 05528, 05555

**Recommended use** Air brake anti-freeze

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufactured or sold by:**

**Company name** CRC Industries, Inc.  
**Address** 885 Louis Dr.  
Warminster, PA 18974 US

**Telephone**

**General Information** 215-674-4300

**Technical Assistance** 800-521-3168

**Customer Service**

**24-Hour Emergency (CHEMTREC)** 800-272-4620

703-527-3887 (US)

703-527-3887 (International)

**Website** www.crcindustries.com

## 2. Hazard(s) identification

**Physical hazards** Flammable liquids Category 2

**Health hazards** Acute toxicity, oral Category 3

Acute toxicity, dermal Category 3

Acute toxicity, inhalation Category 3

Reproductive toxicity Category 2

Specific target organ toxicity, single exposure Category 1

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Highly flammable liquid and vapor. Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. Suspected of damaging fertility or the unborn child. Causes damage to organs (eyes, central nervous system).

**Precautionary statement**

**Prevention**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.



<b>Response</b>	If swallowed: Immediately call a poison center/doctor. Rinse mouth. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If exposed or concerned: Get medical attention. In case of fire: Do not use water jet as an extinguisher, as this will spread the fire.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Methanol		67-56-1	90 - 100

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician.
<b>Skin contact</b>	Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical advice/attention if you feel unwell. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
<b>Most important symptoms/effects, acute and delayed</b>	Dizziness. Headache. Nausea, vomiting. Irritation of eyes and mucous membranes. Upper respiratory tract irritation. Skin irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Take off immediately all contaminated clothing. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Alcohol resistant foam. Water fog. Carbon dioxide (CO <sub>2</sub> ). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>General fire hazards</b>	Highly flammable liquid and vapor.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

### Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent entry into waterways, sewer, basements or confined areas.

### Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. For product usage instructions, please see the product label.

### Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep container tightly closed. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Methanol (CAS 67-56-1)	PEL	260 mg/m3 200 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Methanol (CAS 67-56-1)	STEL	250 ppm
	TWA	200 ppm

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Methanol (CAS 67-56-1)	STEL	325 mg/m3 250 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
	TWA	260 mg/m <sup>3</sup> 200 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines****US - California OELs: Skin designation**

Methanol (CAS 67-56-1) Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

Methanol (CAS 67-56-1) Skin designation applies.

**US - Tennessee OELs: Skin designation**

Methanol (CAS 67-56-1) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

Methanol (CAS 67-56-1) Can be absorbed through the skin.

**US NIOSH Pocket Guide to Chemical Hazards: Skin designation**

Methanol (CAS 67-56-1) Can be absorbed through the skin.

**Appropriate engineering controls**

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** Wear protective gloves such as: Nitrile. Rubber.

**Other** Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**Respiratory protection**

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance**

**Physical state** Liquid.

**Form** Liquid.

**Color** Colorless.

**Odor** Pungent. Alcoholic.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** -144 °F (-97.8 °C) estimated

**Initial boiling point and boiling range** 148.5 °F (64.7 °C) estimated

**Flash point** 54 °F (12.2 °C) Tag Closed Cup

**Evaporation rate** Fast.

**Flammability (solid, gas)** Not available.

## Upper/lower flammability or explosive limits

Flammability limit - lower (%)	2.6 % estimated
Flammability limit - upper (%)	36 % estimated
Vapor pressure	133.2 hPa estimated
Vapor density	1.1 (air = 1)
Relative density	0.79
Solubility (water)	Completely soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	725 °F (385 °C) estimated
Decomposition temperature	Not available.
Viscosity (kinematic)	Not available.
Percent volatile	99.9 % estimated

## 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Formaldehyde.

## 11. Toxicological information

### Information on likely routes of exposure

Ingestion	Toxic if swallowed. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness.
Inhalation	Toxic if inhaled.
Skin contact	Toxic in contact with skin.
Eye contact	Direct contact with eyes may cause temporary irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Dizziness. Headache. Nausea, vomiting. Irritation of eyes and mucous membranes. Upper respiratory tract irritation. Skin irritation.

### Information on toxicological effects

**Acute toxicity** Toxic if inhaled. Toxic in contact with skin. Toxic if swallowed.

Product	Species	Test Results
Air Brake Anti-Freeze & Conditioner		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	12816.9443 mg/kg estimated
<i>Inhalation</i>		
LC50	Rat	64084.7188 ppm, 4 hours estimated 83.981 mg/l, 4 hours estimated
<i>Oral</i>		
LD50	Human	50.0662 mg/kg estimated
	Rat	5627.0654 mg/kg estimated
LDL0	Human	300.3971 mg/kg estimated

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory sensitization</b>	Not available.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>Reproductive toxicity</b>	Suspected of damaging fertility or the unborn child.
<b>Specific target organ toxicity - single exposure</b>	Causes damage to organs: Eyes. Central nervous system. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are stomach ache, nausea, vomiting, dullness, visual disorder and blindness.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	May be an aspiration hazard.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species	Test Results
Air Brake Anti-Freeze & Conditioner		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Daphnia
		16121.3125 mg/l, 48 hours estimated
Fish	LC50	Fish
		22749.9609 mg/l, 96 hours estimated
<b>Components</b>		
<b>Species</b>		
<b>Test Results</b>		
Methanol (CAS 67-56-1)		
<b>Aquatic</b>		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)
		18000 - 20000 mg/l, 96 hours
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna)
		> 10000 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)
		18000 - 20000 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Partition coefficient n-octanol / water (log Kow)**

Methanol -0.77

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal of waste from residues / unused products** If discarded, this product is considered a RCRA ignitable waste, D001. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose in accordance with all applicable regulations.

**Hazardous waste code** D001: Waste Flammable material with a flash point <140 F  
F003: Waste Non-halogenated Solvent - Spent Non-halogenated Solvent

**US RCRA Hazardous Waste U List: Reference**

Methanol (CAS 67-56-1) U154

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

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### DOT

UN number	UN1230
UN proper shipping name	Methanol
Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Packing group	II
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	IB2, T7, TP2
Packaging exceptions	150
Packaging non bulk	202
Packaging bulk	242

### IATA

UN number	UN1230
UN proper shipping name	Methanol
Transport hazard class(es)	
Class	3
Subsidiary risk	6.1
Packing group	II
Environmental hazards	No.
ERG Code	3L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

### IMDG

UN number	UN1230
UN proper shipping name	METHANOL
Transport hazard class(es)	
Class	3
Subsidiary risk	6.1
Packing group	II
Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-D
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

## 15. Regulatory information

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**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**SARA 304 Emergency release notification**

Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**

Methanol (CAS 67-56-1)

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Methanol (CAS 67-56-1)

**CERCLA Hazardous Substances: Reportable quantity**

Methanol (CAS 67-56-1) 5000 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Methanol (CAS 67-56-1)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**Food and Drug Administration (FDA)** Not regulated.**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Section 311/312** Immediate Hazard - Yes  
**Hazard categories** Delayed Hazard - Yes  
 Fire Hazard - Yes  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. New Jersey Worker and Community Right-to-Know Act**

Methanol (CAS 67-56-1)

**US. Massachusetts RTK - Substance List**

Methanol (CAS 67-56-1)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Methanol (CAS 67-56-1)

**US. Rhode Island RTK**

Methanol (CAS 67-56-1)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Methanol (CAS 67-56-1)

Listed: March 16, 2012

**Volatile organic compounds (VOC) regulations****EPA****VOC content (40 CFR 51.100(s))** 100 %**Consumer products (40 CFR 59, Subpt. C)** Not regulated**State****Consumer products** Not regulated**VOC content (CA)** 100 %**VOC content (OTC)** 100 %**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

<b>Issue date</b>	03-24-2015
<b>Prepared by</b>	Allison Cho
<b>Version #</b>	01
<b>Further information</b>	CRC # 620B
<b>HMIS® ratings</b>	Health: 2* Flammability: 3 Physical hazard: 0 Personal protection: B
<b>NFPA ratings</b>	Health: 2 Flammability: 3 Instability: 0

### NFPA ratings



### Disclaimer

CRC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.



## Air Tool Lubricant

Date of Previous Version: 2015-10-05

Revision Date: 2016-02-11

### SAFETY DATA SHEET According to the Hazard Communication Standard, 29 CFR 1910.1200

#### 1. IDENTIFICATION

##### Product identifier

Product name: Air Tool Lubricant

##### Other means of identification

Product Code(s): ATL004, ATL016, ATL032, ATL128, ATL55, A145-4, A145-16, A145-32, A145-128

Substance/mixture: Mixture

##### Recommended use of the chemical and restrictions on use

Identified uses: Lubricant, pneumatic tools.

Uses advised against: Do not use for any purpose other than the one for which it is intended

##### Details of the supplier of the safety data sheet

Supplier Address: Coilhose Pneumatics/Acme Automotive  
19 Kimberly Road  
East Brunswick, NJ 08816  
Phone: +1 800-526-2100

Contact Point: Customer Service

E-mail Address: info@coilhose.com

##### Emergency telephone number

Company Phone Number: +1 (732) 390-8480 – 8:00AM to 7:00PM EST Monday thru Friday

Emergency telephone: POISON CONTROL: +1 800-222-1222 (24h)

#### 2. HAZARDS IDENTIFICATION

##### Classification

Aspiration toxicity - Category 1

##### Label elements



##### **DANGER**

May be fatal if swallowed and enters airways

##### **Ingestion:**

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting

##### **Precautionary Statements – Storage:**

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Store locked up

### Precautionary Statements – Disposal:

Dispose of contents/ container to an approved waste disposal plant

### Unknown Acute Toxicity:

Not applicable

### Hazards not otherwise classified (HNOC):

None known

### Other information

**Physical-Chemical Properties:** Contaminated surfaces will be extremely slippery.

**Environmental properties:** Should not be released into the environment.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	95-100

\* The exact percentage (concentration) of composition has been withheld as a trade secret

**Additional information:** Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

## 4. FIRST AID MEASURES

### First aid measures for different exposure routes

**General advice:** IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.

**Eye contact:** Rinse thoroughly with plenty of water, also under the eyelids.

**Skin contact:** Remove contaminated clothing and shoes. Wash skin with soap and water. Wash contaminated clothing before reuse. High pressure jets may cause skin damage. In this case, the casualty should be sent immediately to hospital.

**Inhalation:** Move to fresh air.

**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

### Most important symptoms/effects, acute and delayed

**Skin contact:** Not classified. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.

**Eye contact:** Not classified.

**Inhalation:** Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system. Aspiration into lungs can produce severe lung damage.

**Ingestion:** May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**Symptoms:** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Difficulty breathing. Coughing and/ or wheezing.

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### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Carbon dioxide (CO<sub>2</sub>). ABC powder. Foam. Water spray or fog.

**Unsuitable Extinguishing Media:** Do not use a solid water stream as it may scatter and spread fire.

**Special Hazard:** Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.

### Explosion Data

**Sensitivity to Mechanical Impact:** None.

**Sensitivity to Static Discharge:** None.

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate non-essential personnel

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**General Information:** Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

Other information See Section 12 for additional information.

### Environmental precautions

**General Information:** Do not allow material to contaminate ground water system. Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.

### Methods and materials for containment and cleaning up

**Methods for cleaning up:** Dam up. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling:** When using, do not eat, drink or smoke. For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing.

**Prevention of fire and explosion:** Take precautionary measures against static discharges. Ground/bond containers, tanks and transfer/receiving equipment.

**Hygiene measures:** Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not use abrasives,

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solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

## Conditions for safe storage, including any incompatibilities

**Technical measures/Storage conditions:** Keep away from food, drink and animal feeding stuffs. Keep in a bounded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce all indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Protect from frost, heat and sunlight. Protect from moisture.

**Materials to Avoid:** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure limits:** Mineral oil mist:  
USA: OSHA (PEL) TWA 5 mg/m<sup>3</sup>, NIOSH (REL) TWA 5 mg/m<sup>3</sup>, STEL 10 mg/m<sup>3</sup>, ACGIH (TLV) TWA 5 mg/m<sup>3</sup> (highly refined).

### Exposure controls

**Engineering Measures** Apply technical measures to comply with the occupational exposure limits.

### Individual protection measures, such as personal protective equipment

**General Information:** If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.

**Eye/Face Protection:** If splashes are likely to occur, wear: Safety glasses with side-shields.

**Skin and body protection:** Wear suitable protective clothing. Protective shoes or boots.

**Hand Protection:** Hydrocarbon-proof gloves. Fluorinated rubber. Nitrile rubber. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

**Respiratory protection:** None required under normal usage. If exposure limits are exceeded or irritation is experienced, IOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene measures:** Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Physical and chemical properties

**Appearance:** limpid

**Color** yellow liquid  
**Physical State @20°C** Characteristic  
**Odor** Characteristic  
**Odor Threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
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<b>pH</b>		Not applicable	
<b>Melting point/range</b>		No information available	
<b>Boiling point/boiling range</b>		Not applicable	
<b>Flash point</b>	>= 197.8 °C >= 388 °F		Cleveland Open Cup (COC) ASTM D 92 Cleveland Open Cup (COC) ASTM D 92
<b>Evaporation rate</b>		No information available	
<b>Flammability Limits in Air upper</b>		No information available	
<b>Upper</b>	-	No information available	
<b>Lower</b>	-	No information available	
<b>Vapor Pressure</b>		No information available	
<b>Vapor density</b>		No information available	
<b>Relative density</b>	0.860	@ 15 °C	ASTM D 1298
<b>Density</b>	860 kg/m3	@ 15 °C	ASTM D 1298
<b>Water solubility</b>		Not applicable	
<b>Solubility in other solvents</b>		No information available	
<b>logPow</b>		No information available	
<b>Autoignition temperature</b>		No information available	
<b>Decomposition temperature</b>		No information available	
<b>Viscosity, kinematic</b>	18.9 - 24.2 mm2/s	@ 40 °C	ASTM D 445
<b>Explosive properties</b>	Not explosive		
<b>Oxidizing Properties</b>	Not applicable		
<b>Possibility of hazardous reactions</b>	Not applicable		
<b>Other information</b>			
<b>Freezing Point</b>		No information available	
<b>Pour point</b>	-20 °C		Cleveland Open Cup (COC)

### 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No information available.
<b>Chemical stability:</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions:</b>	None under normal processing.
<b>Conditions to Avoid:</b>	Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.
<b>Incompatible Materials:</b>	Strong oxidizing agents.
<b>Hazardous Decomposition :</b>	Products None under normal use.

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information.

#### Information on likely routes of exposure

**Principle Routes of Exposure** Inhalation, Ingestion, Eye contact, Skin contact.

#### Numerical measures of toxicity - Product Information

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### Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	LD50 > 5000 mg/kg bw (rat - OECD 420)	LD50 > 5000 mg/kg bw (rabbit - OECD 402)	LC50 (4h) > 5 mg/l (aerosol) (rat - OECD 403)

### Information on toxicological effects

- Symptoms:** Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Difficulty breathing. Coughing and/ or wheezing.
- Skin contact:** Not classified. High pressure injection of the products under the skin may have very serious consequences even though no symptom or injury may be apparent.
- Eye contact:** Not classified.
- Inhalation:** Not classified. Inhalation of vapors in high concentration may cause irritation of respiratory system. Aspiration into lungs can produce severe lung damage.
- Ingestion:** May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

- Sensitization Not classified as a sensitizer.  
 Carcinogenicity This product is not classified carcinogenic.

Chemical Name	ACGIH	IARC	NTP	OSHA
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	-	-		-

- Mutagenicity:** This product is not classified as mutagenic.
- Reproductive toxicity:** This product does not present any known or suspected reproductive hazards.
- Aspiration Hazard:** May be fatal if swallowed and enters airways. Risk of serious damage to the lungs (by aspiration).

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Acute aquatic toxicity - Product Information

No information available

#### Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic	Toxicity to microorganisms
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7	EL50 (48h) > 100 mg/l (Pseudokirchnerella subcapitata - OECD 201)	LL50 (96h) > 100 mg/l (Oncorhynchus mykiss - OECD 203)	EL50 (48h) > 10000 mg/l (Daphnia magna - OECD 202)	

#### Chronic aquatic toxicity - Product Information

No information available

#### Chronic aquatic toxicity - Component Information

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Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic	Toxicity to fish	Toxicity to microorganisms
Distillates (petroleum), hydrotreated heavy paraffinic64742-54-7		NOEL (21d) 10 mg/l (Daphnia magna - QSAR Petrotox)	NOEL (14/28d) > 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	

**Effects on terrestrial organisms:** No information available.

### Persistence and degradability

**General Information:** No information available.

### Bioaccumulative potential

**Product Information:** No information available.

**logPow:** No information available

### Mobility

**Soil:** Given its physical and chemical characteristics, the product generally shows low soil mobility

**Air:** Loss by evaporation is limited

**Water:** Insoluble The product spreads on the surface of the water.

### Other adverse effects

**General Information:** No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment

**Waste Disposal Methods:** Dispose of in accordance with local regulations.

**Contaminated packaging:** Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

**DOT:** Not regulated

**TDG:** Not regulated

**MEX:** Not regulated

**ICAO/IATA:** Not regulated

**IMDG/IMO:** Not regulated

**ADR/RID:** Not regulated

**AND:** Not regulated

## 15. REGULATORY INFORMATION

**International Inventories:** All the substances contained in this product are listed or exempted from listing in the following inventories:  
U.S.A. (TSCA)

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## U.S. Federal Regulations

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### SARA 311/312 Hazard Categories

Acute Health Hazard:	Yes
Chronic Health Hazard:	No
Fire Hazard:	No
Sudden Release of Pressure Hazard:	No
Reactive Hazard:	No

### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

## U.S. State Regulations

### California Proposition 65

This product does not contain any Proposition 65 chemicals.

### U.S. State Right-to-Know Regulations

No information available

## 16. OTHER INFORMATION

NFPA	Health Hazard 1	Flammability 1	Instability 0	Physical and chemical hazards –
HMIS	Health Hazard 1	Flammability 1	Physical Hazard 0	Personal Protection X

NFPA (National Fire Protection Association) HMIS (Hazardous Material Information System)

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.





# SAFETY DATA SHEET

Air Tool

## Section 1. Identification

**GHS product identifier** : Air Tool  
**Other means of identification** : Not available.  
**Product type** : Liquid.

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Petroleum lubricating oil  
**Area of application** : Industrial applications.

**Supplier/Manufacturer** : LUBRIPLATE® Lubricants Co.  
129 Lockwood St.  
Newark, NJ 07105  
Telephone no.: 1-973-589-9150

**e-mail address of person responsible for this SDS** : SDS@lubriplate.com

**Emergency telephone number (with hours of operation)** : CHEM-TEL 1-800-255-3924 (24 hour)

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : Not classified.

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 5%

### GHS label elements

**Signal word** : No signal word.  
**Hazard statements** : No known significant effects or critical hazards.

### Precautionary statements

**Prevention** : Not applicable.  
**Response** : Not applicable.  
**Storage** : Not applicable.  
**Disposal** : Not applicable.

**Supplemental label elements** : Avoid contact with skin and clothing. Wash thoroughly after handling.

**Hazards not otherwise classified** : Prolonged or repeated contact may dry skin and cause irritation.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : Not applicable.  
**Product code** : Not available.

Ingredient name	Other names	%	CAS number
Distillates (petroleum), hydrotreated heavy naphthenic	Distillates (petroleum), hydrotreated heavy naphthenic	60-100	64742-52-5
Distillates (petroleum), hydrotreated light naphthenic	Distillates (petroleum), hydrotreated light naphthenic	60-100	64742-53-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.  
**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 dryness  
 cracking  
**Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.  
**Specific treatments** : No specific treatment.

## Section 4. First aid measures

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
sulfur oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 37.78°C (100°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

<u>Ingredient name</u>	<u>Exposure limits</u>
Distillates (petroleum), hydrotreated heavy naphthenic	<p><b>ACGIH TLV (United States, 4/2014).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction</p> <p><b>NIOSH REL (United States, 10/2013).</b> TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist</p> <p><b>OSHA PEL (United States, 2/2013).</b> TWA: 5 mg/m<sup>3</sup> 8 hours.</p>
Distillates (petroleum), hydrotreated light naphthenic	<p><b>ACGIH TLV (United States, 4/2014).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction</p> <p><b>NIOSH REL (United States, 10/2013).</b> TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist</p> <p><b>OSHA PEL (United States, 2/2013).</b> TWA: 5 mg/m<sup>3</sup> 8 hours.</p>

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: splash goggles

## Section 8. Exposure controls/personal protection

### Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. > 8 hours (breakthrough time): Recommended: Nitrile gloves.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Transparent oil.]
- Color** : Amber.
- Odor** : Mineral oil.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Pour point: -34°C (-29.2°F)
- Boiling point** : >288°C (>550.4°F)
- Flash point** : Open cup: 196°C (384.8°F) [Cleveland.]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Lower and upper explosive (flammable) limits** : Lower: 0.9%  
Upper: 7%
- Vapor pressure** : <0.67 kPa (<5 mm Hg) [room temperature]
- Vapor density** : >5 [Air = 1]
- Relative density** : 0.88 [Water = 1]
- Solubility** : Insoluble in the following materials: cold water and hot water.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): 0.3 cm<sup>2</sup>/s (30 cSt)
- Physical/chemical properties comments** : Kinematic viscosity: (100°C (212°F)): 0.05 cm<sup>2</sup>/s (5 cSt)

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 10. Stability and reactivity

Under normal conditions of storage and use, hazardous polymerization will not occur.

**Conditions to avoid** : Keep away from heat, sparks and flame. Keep away from all sources of ignition.

**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.  
Chlorine

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), hydrotreated light naphthenic	LD50 Oral	Rat	>5000 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Distillates (petroleum), hydrotreated heavy naphthenic	Skin - Severe irritant	Rabbit	-	500 milligrams	-

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

**Conclusion/Summary** : The mineral oils in the product contain < 3% DMSO extract (IP 346).

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated heavy naphthenic	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light naphthenic	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

## Section 11. Toxicological information

### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 dryness  
 cracking  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

Not available.

### Bioaccumulative potential

## Section 12. Ecological information

Not available.

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	<b>DOT Classification</b>	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-
<b>Transport hazard class(es)</b>	-	-	-
<b>Packing group</b>	-	-	-
<b>Environmental hazards</b>	No.	No.	No.
<b>Additional information</b>	-	-	-

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.



## Section 15. Regulatory information

**U.S. Federal regulations** : **TSCA 8(a) PAIR**: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts  
**United States inventory (TSCA 8b)**: All components are listed or exempted.  
**Clean Water Act (CWA) 307**: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), hydrotreated heavy naphthenic	60-100	No.	No.	No.	Yes.	No.
Distillates (petroleum), hydrotreated light naphthenic	60-100	No.	No.	No.	Yes.	No.

### SARA 313

Not applicable.

### State regulations

**Massachusetts** : The following components are listed: MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL; MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL

**Pennsylvania** : None of the components are listed.

### California Prop. 65

None of the components are listed.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	*	0
Flammability		1
Physical hazards		0

## Section 16. Other information

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### [National Fire Protection Association \(U.S.A.\)](#)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### [History](#)

**Date of issue/Date of revision** : 03/10/2015

**Date of previous issue** : No previous validation

**Version** : 1

**Prepared by** : IHS

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

**References** : HCS (U.S.A.)- Hazard Communication Standard  
International transport regulations

▣ Indicates information that has changed from previously issued version.

### [Notice to reader](#)

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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# **SAFETY DATA SHEET**

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## **1. Product Identifier**

Product form                      Substance  
Trade name                        Airline Antifreeze  
Product Number(s)                B1800, B18055

### **Relevant Uses**

Uses of Mixture:                      Airline Antifreeze

### **Supplier Details**

Manufacturer Name                      The Berkebile Oil Company, Inc.  
Address:                                    1216 Red Brant Road  
City, State, Zip                            Somerset, PA 15501  
Phone                                        814-443-1656  
Fax    814-443-2873

Emergency Contact                      Chemtrec Emergency Tel # 800-424-9300

## **2. HAZARDS IDENTIFICATION**

### **2.1 Classification of the Substance or Mixture**

Flam.Liq.2                                H225  
Acute Tox. 3 (Oral)                        H301  
Acute Tox 3 (Dermal)                        H311  
Acute Tox 3 (Inhalation)                        H331  
Eye Irrit. 2A                                H319  
Repr. 1B                                    H360  
STOT SE 1                                    H370

### **2.2 Label Elements**



**Signal Word (GHS-US)**

Danger

**Hazard Statements (GHS-US)**

H225 – Highly flammable liquid and vapor

H301+311+H331 – Toxic if swallowed, in contact with skin, or inhaled

H319 – Causes serious eye irritation

H360 – May damage fertility or the unborn child

H370 – Causes damage to organs

**Precautionary Statements (GHS-US)**

P202 - Do not handle until all safety precautions have been read and met

P210 - Keep away from heat, sparks, open flames, hot surfaces – No Smoking

P233 – Keep container tightly closed

P240 – Ground/bond container and receiving equipment

P241 - Use explosion-proof electrical, ventilating, lighting equipment

P242 - Use only non-sparking tools

P243 - Take precautionary measures against static discharge

P261 – Do not breathe vapors

P264 - Wash hands thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves, protective clothing, eye protection, face protection

P301+P310 - If swallowed: Immediately call a doctor

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P307+P311 - If exposed: Call a poison center/doctor

P330 - Rinse mouth

P361 - Take off immediately all contaminated clothing

P363 - Wash contaminated clothing before reuse

P370+P378 - In case of fire: Use Water spray to extinguish

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container to licensed waste management site

- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention

- Obtain special instructions before use.

- Keep Cool

-

**3. Composition / Information on Ingredients**

<b>Chemical name</b>	<b>Common name and synonyms</b>	<b>CAS number</b>
% Methanol	67-56-1	95-100

#### **4. First Aid Measures**

First-aid measures general	:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Call a POISON CENTER or doctor/physician. Methanol is toxic and flammable. Take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment and remove any sources of ignition).
First-aid measures after inhalation	:	Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Obtain medical attention.
First-aid measures after skin contact	:	Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.
First-aid measures after eye contact	:	Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Ensure that folded skin of eyelids is thoroughly washed with water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	:	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Never give anything by mouth to an unconscious person.
4.2 Most Important Symptoms	:	Symptoms may include: dizziness, headache, nausea and loss of coordination. Coma and death may occur if medical treatment is not sought.

#### **5. Fire-Fighting Measures**

Flammable Properties:	As defined by OSHA, this product is a Class IB flammable liquid.
Suitable Extinguishing Media:	Dry chemical, alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> )
Products of Combustion:	Carbon dioxide and carbon monoxide.
Explosion Hazards:	Containers, when exposed to heat from fire, may build pressure and rupture.
Protection of Fire-Fighters:	Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye

and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

## **6. Accidental Release Measures**

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains. If run-off occurs, notify the proper authorities as required, that a spill has occurred.

Methods for Containment & Clean-up: Eliminate all ignition sources. Dike area to contain spill.

Ventilate the area with fresh air. If in confined space or limited air circulation area, clean-up workers should wear appropriate respiratory protection. Recover or absorb spilled material using an absorbent designed for chemical spills. Place used absorbents into proper waste containers.

## **7. Handling and Storage**

Handling Procedures: Avoid contact with skin and eyes. Do not use near sources of ignition or energized equipment. Static ignition hazard can result from handling and use. Electrically bond and ground all containers and equipment before transfer or use of material. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Keep containers closed when not in use. Keep out of reach of children and pets.

Aerosol Storage Level: NA

## **8. Exposure Controls / Personal Protection**

### **Exposure Guidelines:**

COMPONENT	OSHA		ACGIH		OTHER		UNIT
	TWA	STEL	TWA STEL	TWA	TWA	SOURCE	
Methanol NE	200	NE	200 (s)	250 (s)	NE		ppm

**N.E.- Not Established (c)-Ceiling (s)-Skin (v)-Vacated**

### **Controls and Protection:**

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Air monitoring is needed to

determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash-proof goggles.

Skin Protection: Use protective gloves such as nitrile or natural rubber. Also, use full protective clothing if there is prolonged or repeated contact of liquid with skin.

### **9. Physical and Chemical Properties**

Physical state	:	Liquid
Appearance	:	Clear.
Molecular mass	:	32.04 g/mol
Color	:	Colorless.
Odor	:	alcohol odor.
Odor threshold	:	4.2 - 5960 ppm
pH	:	Not applicable
Relative evaporation rate (butyl acetate=1)	:	4.1
Melting point	:	-97.8 °C
Freezing point	:	-97.6 °C
Boiling point	:	64.7 °C
Flash point	:	11 °C
Auto-ignition temperature	:	464 °C
Decomposition temperature	:	Not available
Flammability (solid, gas)	:	No data available
Vapor pressure	:	12.8 kPa @ 20°C
Relative vapor density at 20 °C	:	1.1
Relative density	:	0.791 - 0.793 @ 20°C
Relative density of saturated gas/air mixture	:	1.0
Specific gravity / density	:	792 kg/m <sup>3</sup>
Solubility	:	Miscible with water.
Log Pow	:	0.82
Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	0.8 cP (25 °C)
Explosive properties	:	vapors may form explosive mixture with air.
Oxidizing properties	:	Not oxidizing.
Explosive limits	:	5.5 - 36.5 vol %

### **10. Stability and Reactivity**

Stability: Stable

Conditions to Avoid: Sources of ignition.

Incompatible Materials: Hypochlorites, peroxides, reactive metals such as aluminum and magnesium, sodium, strong acids, strong bases, strong oxidizing agents, zinc

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide

Possibility of Hazardous Reactions: No

### **11. Toxicological Information**

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

#### **Methanol**

<b>LD50 Oral (rat)</b>	<b>5600 mg/kg</b>
<b>LD50 Dermal (rabbit)</b>	<b>15800 mg/kg</b>
<b>Inhalation (rat) ppm</b>	<b>64000 ppm/4h (rat)</b>

Reproductive Toxicity: No information available

Teratogenicity: Methanol has produced fetotoxicity in rats and teratogenicity in mice exposed by inhalation to high concentrations of methanol vapors.

Mutagenicity: No information available

Synergistic Effects: High concentrations of methanol can increase the toxicity of other chemicals, particularly liver toxins.

### **12. Ecological Information**

Ecological studies have not been conducted for this product. The following information is available for components of this product.

Ecotoxicity: No information available

Persistence / Degradability: No information available

Bioaccumulation / Accumulation: No information available

Mobility in Environment: No information available

### **13. Disposal Considerations**

**Waste Classification:** This product is a RCRA hazardous waste for the characteristic of ignitability with the following potential waste codes: D001, F003, U154. (See 40 CFR Part 261.20 – 261.33)

Empty containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

### **14. Transport Information**

US DOT (ground):           **05532, 75532**           UN1230, Methanol, 3, PGII, Limited Quantity\*\*  
   **05528, 05555, 75528** UN1230, Methanol, 3, PG II

ICAO/IATA (air):           **05532, 75532**           UN1230, Methanol, 3 (6.1), PG II, Limited Quantity  
   **05528, 05555, 75528** UN1230, Methanol, 3 (6.1), PGII

IMO/IMDG (water):       **05532, 75532**           UN1230, Methanol, 3 (6.1), PG II, Limited Quantity  
   **05528, 05555, 75528** UN1230, Methanol, 3 (6.1), PGII



**15. Regulatory Information****U.S. Federal Regulations:**

Toxic Substances Control Act (TSCA):

All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Reportable Quantities (RQ's) exist for the following ingredients: Methanol (5000 lbs)

**Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.**

Superfund Amendments Reauthorization Act (SARA) Title III:

Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories: Fire Hazard Yes

Reactive Hazard No

Release of Pressure No

Acute Health Hazard Yes

Chronic Health Hazard No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Methanol (> 99%)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs): Methanol

Occupational Safety and Health Administration:

This product is regulated by the Hazard Communications Standard.

**U.S. State Regulations:**

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):

This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: Methanol

Consumer Products VOC Regulations: This product is not regulated.

State Right to Know:

New Jersey: 67-56-1

Pennsylvania: 67-56-1

Massachusetts: 67-56-1

Rhode Island : 67-56-1

**Canadian Regulations:**Controlled Products Regulations:

This product has been classified in accordance with the hazard criteria of the Controlled Product Regulation and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: B2, D1B, D2A, D2B

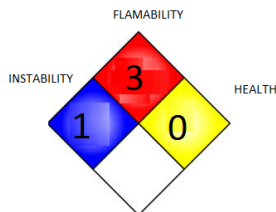
Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

**European Union Regulations:**

RoHS Compliance: This product is compliant with Directive 2002/95/EC of the European Parliament and of the

Council of 27 January 2003. This product does not contain any of the restricted substances as listed in Article 4(1) of the RoHS Directive.

**Additional Regulatory Information:** None

**16. Other Information****FPPA Fire:****HMIS II**

<b>HEALTH</b>	<b>1</b>
<b>FLAMABILITY</b>	<b>3</b>
<b>PHYSICAL HAZZARD</b>	<b>0</b>

Prepared By: Kirk Sherbine  
Berkebile Oil #: B1800-030115  
Revision Date: 3/1/2015  
Changes since last revision: All

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of Berkebile Oil's knowledge or obtained from sources believed by Berkebile Oil to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or Berkebile Oil Company.



Dynaflux SDS 371B 4/22/2014

## Safety Data Sheet

Product: 371 All Metal Water Dilutable Cutting Fluid (Liquid)

### Part 1: Identification of the Substance/Mixture and of the Company/Undertaking.

Identification 371B

Product Use Description: Oil Based, Water Emulsifiable Cutting Fluid

Trade Name: 371 All Metal Water Dilutable Cutting Fluid

Manufacturers Name: Dynaflux, Inc.

241 Brown Farm Rd.

Cartersville, GA 30120 U.S.A.

Emergency Telephone Number: Chemtel: For U.S.: 800-255-3924 International: 813-248-0585

### Part 2: Hazards Identification

Symbol: None

Signal Word: None

#### Emergency Overview:

Light amber to amber liquid. Odor: Mild petroleum odor.

#### Hazard Rankings

	HMIS	NFPA
Health	0	0
Fire Hazard	1	1
Reactivity	0	0

\*= Chronic Health Hazard

#### Major Exposure routes:

Skin

#### Eye contact

This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists.

#### Skin contact

This material can cause mild skin irritation from prolonged or repeated skin contact. Initial symptoms may be minor.

#### Inhalation

No significant adverse health effects are expected to occur upon short-term exposure.

#### Ingestion

If swallowed, no significant adverse health effects are anticipated. Ingestion can cause mild irritation to the digestive tract or cause a laxative effect. Because of the low viscosity of this material, this material can enter the lungs directly by aspiration (e.g. during swallowing or vomiting).

#### Conditions Aggravated by Exposure

Medical conditions aggravated by exposure to this material may include pre-existing skin disorders.

#### Carcinogenic Potential

This product does not contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC or NTP.

OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (20 CFR 1910.1200).

OSHA Health Hazard Classification				OSHA Physical Hazard Classification					
Irritant	<input type="checkbox"/>	Toxic	<input type="checkbox"/>	Combustible	<input type="checkbox"/>	Explosive	<input type="checkbox"/>	Pyrrophoric	<input type="checkbox"/>
Sensitizer	<input type="checkbox"/>	Highly Toxic	<input type="checkbox"/>	Flammable	<input type="checkbox"/>	Oxidizer	<input type="checkbox"/>	Water-reactive	<input type="checkbox"/>
Corrosive	<input type="checkbox"/>	Carcinogenic	<input type="checkbox"/>	Compressed Gas	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>	Unstable	<input type="checkbox"/>

### Part 3: Composition / Information on Ingredients

Component Name(s)	CAS Registry No.	Concentration (%)
Distillates, petroleum, hydrotreated heavy naphthenic	64742-52-5	0-100

### Part 4: First Aid Measures

#### Eyes

Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness, or pain persists. **GHS Category 2B**

#### Skin

Remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Thoroughly clean contaminated clothing before reuse. Discard contaminated leather goods. If material is injected under the skin, seek medical attention immediately.

#### Inhalation

Vaporization is not expected at ambient temperatures. This material is not expected to cause inhalation-related disorders under anticipated conditions of use. In case of overexposure, move the person to fresh air.

#### Ingestion:

Do not induce vomiting unless directed to by a physician. Do not give anything to drink unless directed to by a physician. Never give anything by mouth to a person who is not fully conscious. If large amounts are swallowed or irritation or discomfort occurs, seek medical attention immediately. **GHS Category 5**

#### Notice to Physician

This material presents a significant aspiration hazard. Aspiration may produce chemical pneumonitis. Induction of emesis is not recommended because of the potential for aspiration.

Continued

## Part 5: Fire Fighting Measures

**Flammability Classification:** NFPA Class-IIIB combustible material. Slightly combustible!

**Flash Point Method:** OPEN CUP: 151°C (304°F) (Cleveland)

**Lower Flammable Limit:** No data

**Upper Flammable Limit:** No data

**Auto-Ignition Temperature:** Not available.

**Means of Extinction:** Use dry chemical, foam, Carbon dioxide or water fog.

**Fire Fighting Instructions/Equipment:** Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.

**Hazardous Combustion Products:** Carbon dioxide, carbon monoxide, smoke, fumes and unburned hydrocarbons.

## Part 6: Accidental Release Measures

Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, absorb or cover with dry earth, sand or other inert non-combustible absorbent material and place into waste containers for disposal. Dispose of material in accordance with all local, municipal, state and federal laws.

## Part 7: Handling and Storage

### Handling

Avoid water contamination and extreme temperatures to minimize product degradation.

### Storage

Keep container closed. Do not store with strong oxidizing agents. Do not store at temperatures above 120°F or in direct sunlight for extended periods of time. Dispose of material in accordance with all local, municipal, state and federal laws.

## Part 8: Exposure Controls / Personal Protection

### Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits.

### Eye Protection

Safety glasses equipped with side shields should be adequate protection under most conditions of use.

### Hand Protection

Use gloves constructed of chemical resistant materials such as neoprene or heavy nitrile rubber if frequent or prolonged contact is expected.

### Respiratory Protection

Vaporization is not expected at ambient temperatures. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities.

Continued

## Part 9: Physical and Chemical Properties

<b>Physical State :</b>	Liquid
<b>Odor and Appearance:</b>	Mild petroleum odor; color: Brown
<b>Specific Gravity (H2O=1):</b>	0.9
<b>pH:</b>	N.A.
<b>Boiling Point:</b>	N.A.
<b>Freezing Point</b>	N.A.
<b>Vapor Pressure:</b>	<0.01kPa (,0.1 mmHg) (at 20°C)
<b>Viscosity:</b>	(ASTM D2161) = AP 100 SUS @ 100°F
<b>Volatility:</b>	Negligible volatility
<b>Density</b>	AP 7.53 Lbs/gal.
<b>Solubility in water:</b>	Negligible
<b>VOC's</b>	0%

## Part 10: Stability and Reactivity

### Stability

Stable

### Conditions to avoid

Keep away from extreme heat, sparks, open flame and strongly oxidizing conditions.

### Material Incompatibility

Strong oxidizers

## Part 11. Toxicological Information

### Toxicity Data

#### Distillates, petroleum, hydrotreated heavy naphthenic:

ORAL (LD50): Acute: >5000 mg/kg [Rat]

DERMAL (LD50): Acute: >2000 mg/kg [Rabbit]

Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipid lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

These materials have not been determined to be carcinogenic by IARC, NTP or OSHA.

## Part 12. Ecological Information

### Ecotoxicity

Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal and aquatic life.

## Part 13. Disposal Considerations

**Disposal Method:** dispose in accordance with federal, state and local regulations.

Conditions of use may cause this material to become a hazardous waste, as defined by Federal or State regulations. It is the responsibility of the user to determine if the material is a hazardous waste at the time of disposal. Transportation, treatment, storage and disposal of waste material must be conducted in accordance with federal, state and local regulations.

## Part 14. Transport Information

This material is not a U.S. Department of Transportation regulated material.

**Proper shipping name:** Not Regulated

**This material is not regulated as a hazardous material.**

**UN Proper Shipping Name:** Not Applicable

**Hazardous Class or Division:** Not Applicable

**UN Number:** Not Applicable

**Packaging Group:** Not Applicable

**IMDG:** Not regulated

Not a DOT "Marine Pollutant" per 49 CFR 171.8

## **Part 15. Regulatory Information**

### **TSC Inventory**

This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

### **SARA 302/304**

The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQ's) and Reportable Quantities (RQ's) for "Extremely hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

### **SARA 313**

No components were identified I concentrations above the de minimis levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: No components were identified.

### **CERCLA**

As defined by CERCLA (Comprehensive Environmental Response, Compensation and Liability Act of 1980) the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. this product or refinery stream is not known to contain chemical substances subject to this statute.

### **California Proposition 65**

This product is not known to contain any of the components for which the State of California has found to cause cancer, birth defects or other reproductive harm.

### **New Jersey Right-to-Know Label**

Petroleum Oil

## **Part 16. Other Information**

Dynaflux, Inc.

241 Brown Farm Rd.

Cartersville, GA 30120

Prepared by: E. Schaffstall

### **Disclaimer of Expressed and implied Warranties:**

The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date of the I Safety Data sheet was prepared. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices as specified on the label copy.



# SAFETY DATA SHEET

## IR ALL SEASON

Version: 1.0

Revision Date: 04/01/2015

Print Date: 04/02/2015

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: IR ALL SEASON

Product Use Description: Lubricant

Company:

Distributor  
INGERSOLL RAND  
800D BEATY ST  
DAVIDSON, NC  
28036  
United States of America

Telephone: +01 704-655-4000

Emergency telephone number: U.S. 24-Hour Emergency #: 800-424-9300  
:  
Outside U.S. Emergency #: +01 703-527-3887

Prepared by Product Safety Department  
(US) +1 866-430-2775

Recommended use of the chemical and restrictions on use

Recommended use : Lubricant

Restrictions on use : Reserved for industrial and professional use.

### SECTION 2. HAZARDS IDENTIFICATION

Form	liquid
Colour	straw
Odour	mild ester-like

#### GHS Classification

Skin sensitisation : Category 1



# SAFETY DATA SHEET

## IR ALL SEASON

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Acute aquatic toxicity : Category 3  
Chronic aquatic toxicity : Category 3

### GHS Label element

Signal word : **Warning**

Hazard pictograms : 

Hazard statements : H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.

Other hazards : None

Precautionary statements : **Prevention:**  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P273 Avoid release to the environment.  
P280 Wear protective gloves.  
**Response:**  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.  
P363 Wash contaminated clothing before reuse.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

### Carcinogenicity:

**IARC** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Hazardous components

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Chemical Name	CAS-No.	Concentration (%)
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	68411-46-1	>= 1 - < 5 %
N-1-naphthylaniline	90-30-2	>= 0.1 - < 1 %
triphenyl phosphate	115-86-6	>= 0.1 - < 1 %
diphenylamine	122-39-4	>= 0.1 - < 1 %

### SECTION 4. FIRST AID MEASURES

- If inhaled : Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
If not breathing, give artificial respiration.  
Call a physician or poison control centre immediately.  
If breathing is difficult, give oxygen.  
Keep respiratory tract clear.
- In case of skin contact : Wash off with soap and plenty of water.  
If symptoms persist, call a physician.  
Take off contaminated clothing and wash before reuse.
- In case of eye contact : If eye irritation persists, consult a specialist.
- If swallowed : Rinse mouth with water.  
If victim is fully conscious, give a cupful of water.  
DO NOT induce vomiting unless directed to do so by a physician or poison control center.  
Never give anything by mouth to an unconscious person.  
Do not give milk or alcoholic beverages.  
Obtain medical attention.
- Most important symptoms and effects, both acute and delayed : Sensitisation
- Notes to physician : For specialist advice physicians should contact the Poisons Information Service.

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during firefighting : Burning produces irritant fumes.  
Burning produces noxious and toxic fumes.
- Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal.

### SECTION 7. HANDLING AND STORAGE

Advice on safe handling : For personal protection see section 8.  
No special handling advice required.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.

Materials to avoid : Strong oxidizing agents

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

N-1-naphthylaniline	90-30-2	TWA	10 ml/m3	ACGIH
triphenyl phosphate	115-86-6	TWA	3 mg/m3	ACGIH
		TWA	3 mg/m3	OSHA Z-1
		TWA	3 mg/m3	OSHA P0
		TWA	3 mg/m3	NIOSH REL
diphenylamine	122-39-4	TWA	10 mg/m3	ACGIH
		TWA	10 mg/m3	OSHA P0
		TWA	10 mg/m3	NIOSH REL

#### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Hand protection  
Remarks : Solvent-resistant gloves (butyl-rubber)

Eye protection : Safety glasses

Skin and body protection : Protective suit

Hygiene measures : General industrial hygiene practice.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Color	: straw
Odor	: mild ester-like
Odour Threshold	: No data available
pour point	: -40 °C
Boiling point/boiling range	: No data available
Evaporation rate	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: 0.92
<u>Solubility(ies)</u>	
Water solubility	: negligible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Viscosity	
Viscosity, kinematic	: No data available

### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Stable under recommended storage conditions.
Chemical stability	: No decomposition if stored and applied as directed.
Possibility of hazardous reactions	: No hazards to be specially mentioned.
Conditions to avoid	: Contamination
Incompatible materials	: Strong oxidizing agents

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Hazardous decomposition products : No hazardous decomposition products are known.

### SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Product) : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Acute inhalation toxicity (Product) : Acute toxicity estimate: > 40 mg/l  
Exposure time: 4 h

Method: Calculation method

Acute dermal toxicity (Product) : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Skin irritation  
Benzenamine, N-phenyl-,  
reaction products with 2,4,4-  
trimethylpentene  
(Component) : Species: Rabbit  
Result: No skin irritation  
Method: OECD Test Guideline 404

N-1-naphthylaniline  
(Component) : Species: Rabbit  
Result: No skin irritation  
Method: Draize Test

triphenyl phosphate  
(Component) : Species: Rabbit  
Result: No skin irritation  
Method: OECD Test Guideline 404  
Exposure time: 4 h

diphenylamine (Component) : Species: Rabbit  
Result: Mild skin irritation

Eye irritation  
Benzenamine, N-phenyl-,  
reaction products with 2,4,4-  
trimethylpentene  
(Component) : Species: Rabbit  
Result: No eye irritation  
Method: OECD Test Guideline 405

N-1-naphthylaniline  
(Component) : Species: Rabbit  
Result: No eye irritation  
Method: OECD Test Guideline 405

triphenyl phosphate  
(Component) : Species: Rabbit  
Result: No eye irritation  
Method: OECD Test Guideline 405

diphenylamine (Component) : Species: Rabbit  
Result: Mild eye irritation

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- Sensitisation (Product) : Remarks: May cause sensitisation by skin contact.
- Repeated dose toxicity  
diphenylamine (Component) : Species: Mouse, male  
Application Route: Oral  
Target Organs: Blood, Liver, Kidney  
Exposure time: (90 d)  
NOEL: 1.7 mg/kg  
Lowest observed effect level: 93.8 mg/kg
- Species: Mouse, female  
Application Route: Oral  
Target Organs: Blood, Liver, Kidney  
Exposure time: (90 d)  
NOEL: 2.1 mg/kg  
Lowest observed effect level: 107 mg/kg
- CMR effects  
Benzenamine, N-phenyl-,  
reaction products with 2,4,4-  
trimethylpentene  
(Component) : Mutagenicity: Not mutagenic in Ames Test.
- N-1-naphthylaniline  
(Component) : Carcinogenicity: Animal testing did not show any carcinogenic effects.  
Mutagenicity: Animal testing did not show any mutagenic effects., Tests  
on bacterial or mammalian cell cultures did not show mutagenic effects.
- triphenyl phosphate  
(Component) : Carcinogenicity: Animal testing did not show any carcinogenic effects.  
Mutagenicity: In vitro tests did not show mutagenic effects  
Reproductive toxicity: No toxicity to reproduction
- diphenylamine (Component) : Carcinogenicity: Not classifiable as a human carcinogen.  
Mutagenicity: Animal testing did not show any mutagenic effects.  
Teratogenicity: No toxicity to reproduction  
Reproductive toxicity: No toxicity to reproduction
- Further information (Product) : No data available

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects

- Toxicity to fish  
Benzenamine, N-phenyl-,  
reaction products with 2,4,4-  
trimethylpentene  
(Component) : LC50: > 71 mg/l  
Exposure time: 96 h
- Species: Danio rerio (zebra fish)

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Method: OECD Test Guideline 203

N-1-naphthylaniline  
(Component)

: LC50: 0.44 mg/l  
Exposure time: 96 h

Species: *Oncorhynchus mykiss* (rainbow trout)  
semi-static test Analytical monitoring: yes

triphenyl phosphate  
(Component)

: LC50: 0.78 mg/l  
Exposure time: 96 h

Species: *Lepomis macrochirus* (Bluegill sunfish)  
static test  
LC50: 1.2 mg/l  
Exposure time: 96 h

diphenylamine (Component)

: LC50: 2.2 mg/l  
Exposure time: 96 h

Species: *Oryzias latipes* (Orange-red killifish)  
static test

Species: *Oncorhynchus mykiss* (rainbow trout)

### Toxicity to daphnia and other aquatic invertebrates

Benzenamine, N-phenyl-,  
reaction products with 2,4,4-  
trimethylpentene  
(Component)

: EC50: 51 mg/l  
Exposure time: 48 h  
Species: *Daphnia magna* (Water flea)  
Method: OECD Test Guideline 202

N-1-naphthylaniline  
(Component)

: EC50: 0.68 mg/l  
Exposure time: 48 h  
Species: *Daphnia magna* (Water flea)  
semi-static test Analytical monitoring: yes

triphenyl phosphate  
(Component)

: EC50: 1 mg/l  
Exposure time: 48 h  
Species: *Daphnia magna* (Water flea)

EC50: 0.36 mg/l  
Exposure time: 48 h

diphenylamine (Component)

: EC50: 1.2 mg/l  
Exposure time: 48 h  
Species: *Daphnia magna* (Water flea)

### Toxicity to algae

Benzenamine, N-phenyl-,  
reaction products with 2,4,4-

: EbC50: > 100 mg/l  
Exposure time: 72 h

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trimethylpentene  
(Component)                      Species: Desmodesmus subspicatus (green algae)  
Method: OECD Test Guideline 201

triphenyl phosphate  
(Component)                      : NOEC: 0.25 - 2.5 mg/l  
Exposure time: 72 h  
Species: Green algae (Scenedesmus subspicatus)  
Growth inhibition Method: OECD Test Guideline 201

Toxicity to bacteria  
N-1-naphthylaniline  
(Component)                      : EC50: 2 mg/l  
Exposure time: 48 h  
Species: Protozoa

EC50: > 10,000 mg/l  
Exposure time: 3 h  
Species: Bacteria

Toxicity to fish (Chronic toxicity)  
triphenyl phosphate  
(Component)                      : NOEC: 0.037 mg/l  
Exposure time: 30 d  
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)  
N-1-naphthylaniline  
(Component)                      : NOEC: 0.02 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)  
Analytical monitoring: yes

### Elimination information (persistence and degradability)

Bioaccumulation (Product)        : Remarks:  
No data available

Mobility (Product)                : Remarks:  
No data available

Biodegradability (Product)        : Remarks:  
No data available

### Further information on ecology

#### Ecotoxicology Assessment

Results of PBT assessment (Product)

No data available

Additional ecological  
information (Product)                : An environmental hazard cannot be excluded in the event of  
unprofessional handling or disposal.  
This product has no known ecotoxicological effects.



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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

- Waste from residues : Dispose of wastes in an approved waste disposal facility. The product should not be allowed to enter drains, water courses or the soil.  
In accordance with local and national regulations.  
Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.
- Contaminated packaging : Dispose of as unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

### SECTION 14. TRANSPORT INFORMATION

#### ADR

Not dangerous goods

#### RID

Not dangerous goods

#### MERCOSUR

Not dangerous goods

#### DOT

Not dangerous goods

#### IATA

Not dangerous goods

#### IMDG

Not dangerous goods

Additional advice: Not classified as dangerous in the meaning of transport regulations.

### SECTION 15. REGULATORY INFORMATION

**EPCRA - Emergency Planning and Community Right-to-Know Act**

**CERCLA Reportable Quantity**

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Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
1-naphthylamine	134-32-7	100	*
2-naphthylamine	91-59-8	10	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

### SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
aniline	62-53-3	5000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**California Prop 65** WARNING! This product contains a chemical known to the State of California to cause cancer.

aniline	62-53-3
1-naphthylamine	134-32-7
2-naphthylamine	91-59-8
naphthalene	91-20-3

### The components of this product are reported in the following inventories:

<b>US.TSCA</b>	On TSCA Inventory
<b>DSL</b>	All components of this product are on the Canadian DSL.
<b>AICS</b>	On the inventory, or in compliance with the inventory
<b>NZIoC</b>	On the inventory, or in compliance with the inventory
<b>ENCS</b>	On the inventory, or in compliance with the inventory
<b>KECI</b>	On the inventory, or in compliance with the inventory
<b>PICCS</b>	On the inventory, or in compliance with the inventory
<b>IECSC</b>	On the inventory, or in compliance with the inventory

## SECTION 16. OTHER INFORMATION

### Further information

# SAFETY DATA SHEET

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



# SAFETY DATA SHEET

Revision Date 27-Mar-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** 133K ANTI-SEIZE LUBRICANT 8OZ

### Other means of identification

**Product Code** 80078

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Lubricant

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

ITW Permatex  
10 Columbus Blvd.  
Hartford, CT 06106 USA

#### Distributor

ITW Permatex Canada  
35 Brownridge Road, Unit 1  
Halton Hills, ON Canada L7G 0C6  
Telephone: (800) 924-6994

**Company Phone Number** 1-87-Permatex  
(877) 376-2839

**24 Hour Emergency Phone Number** Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

**E-mail address** mail@permatex.com

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral

Category 4

### Label elements

#### Emergency Overview

#### **Warning**

Harmful if swallowed

**Appearance** Silver**Physical state** Paste**Odor** Mild petroleum odor**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex I  
Harmful to aquatic life with long lasting effects

Unknown acute toxicity

19.23275% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**substance**

Chemical Name	CAS No	Weight-%	Trade Secret
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC	64742-52-5	30 - 60	*
CALCIUM OXIDE	1305-78-8	10 - 30	*
GRAPHITE	7782-42-5	10 - 30	*
ALUMINIUM POWDER	7429-90-5	5 - 10	*
MINERAL OIL	8042-47-5	3 - 7	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of first aid measures****General advice**

Get medical advice/attention if you feel unwell.

**Eye contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

<b>Skin contact</b>	IF ON SKIN: Wash skin with soap and water. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	IF SWALLOWED. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See section 2 for more information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>), Dry chemical, Foam

**Unsuitable extinguishing media**

None.

**Specific hazards arising from the chemical**

None in particular.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

**Precautions for safe handling****Advice on safe handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities****Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials**

Strong oxidizing agents, Acids, Alkali, Amines

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
CALCIUM OXIDE 1305-78-8	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup> not in effect as a result of reconsideration	IDLH: 25 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>
GRAPHITE 7782-42-5	TWA: 2 mg/m <sup>3</sup> respirable fraction all forms except graphite fibers	TWA: 15 mg/m <sup>3</sup> total dust synthetic TWA: 5 mg/m <sup>3</sup> respirable fraction synthetic (vacated) TWA: 2.5 mg/m <sup>3</sup> respirable dust natural (vacated) TWA: 10 mg/m <sup>3</sup> total dust synthetic (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup> natural respirable dust
ALUMINIUM POWDER 7429-90-5	TWA: 1 mg/m <sup>3</sup> respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 5 mg/m <sup>3</sup> Al Aluminum	TWA: 5 mg/m <sup>3</sup> Al

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls****Engineering Controls**

Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin and body protection**

Wear protective gloves and protective clothing.

**Respiratory protection**

Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

**General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Physical state**  
**Appearance**

Paste  
Silver

<b>Odor</b>	Mild petroleum odor	
<b>Odor threshold</b>	No information available	
<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	No information available	
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	No information available	Not determined
<b>Flash point</b>	> 93 °C / > 200 °F	Tag Closed Cup
<b>Evaporation rate</b>	< 1	Butyl acetate = 1
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	<5 mm Hg	
<b>Vapor density</b>	>1	Air = 1
<b>Relative density</b>	1.17	
<b>Water solubility</b>	Negligible	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	
<b>Autoignition temperature</b>	No information available	
<b>Decomposition temperature</b>	No information available	
<b>Kinematic viscosity</b>	No information available	
<b>Dynamic viscosity</b>	No information available	
<b>Explosive properties</b>	No information available	
<b>Oxidizing properties</b>	No information available	

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	0
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Excessive heat.

**Incompatible materials**

Strong oxidizing agents, Acids, Alkali, Amines

**Hazardous Decomposition Products**

Carbon oxides

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Inhalation**

May cause irritation of respiratory tract.



<b>Eye contact</b>	Contact with eyes may cause irritation. May cause redness and tearing of the eyes.
<b>Skin contact</b>	May cause skin irritation and/or dermatitis.
<b>Ingestion</b>	Harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
CALCIUM OXIDE 1305-78-8	= 500 mg/kg ( Rat )	-	-
MINERAL OIL 8042-47-5	> 5000 mg/kg ( Rat )	-	-

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC 64742-52-5	A2	Group 1	-	X

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*A2 - Suspected Human Carcinogen*

*IARC (International Agency for Research on Cancer)*

*Group 1 - Carcinogenic to Humans*

*Not classifiable as a human carcinogen*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

*X - Present*

**Target Organ Effects** Central Vascular System (CVS), Eyes, Respiratory system, Skin.

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 1978 mg/kg

**ATEmix (inhalation-vapor)** 32255 mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

32.42995% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC 64742-52-5	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
CALCIUM OXIDE 1305-78-8	-	1070: 96 h Cyprinus carpio mg/L LC50 static	-
MINERAL OIL 8042-47-5	-	10000: 96 h Lepomis macrochirus mg/L LC50	-

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

Chemical Name	Partition coefficient
---------------	-----------------------

MINERAL OIL 8042-47-5	>6
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**Other adverse effects**  
No information available

### 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** Not applicable

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
CALCIUM OXIDE 1305-78-8	Corrosive
ALUMINIUM POWDER 7429-90-5	Ignitable powder

### 14. TRANSPORT INFORMATION

**DOT**  
Proper shipping name: Not regulated

**IATA**  
Proper shipping name: Not regulated

**IMDG**  
Proper shipping name: Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

**TSCA** Complies

**DSL/NDSL** Complies

**EINECS/ELINCS** Complies

**ENCS** Natural substance

**IECSC** Complies

**KECL** Complies

**PICCS** Complies

**AICS** Complies

#### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

#### US Federal Regulations

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
ALUMINIUM POWDER - 7429-90-5	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
CALCIUM OXIDE 1305-78-8	X	X	X
GRAPHITE 7782-42-5	X	X	X
ALUMINIUM POWDER 7429-90-5	X	X	X
MINERAL OIL 8012-95-1	X	X	X
COPPER 7440-50-8	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

<b>NFPA</b>	Health hazards 1	Flammability 1	Instability 0	-
<b>HMIS</b>	Health hazards 1	Flammability 1	Physical hazards 0	Personal protection B

NFPA (National Fire Protection Association)  
HMIS (Hazardous Material Information System)

Revision Date 27-Mar-2015

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



# Material Safety Data Sheet

MSDS: 334

## SECTION 1: CHEMICAL PRODUCT AND COMPANY INFORMATION

**Company:**

IDQ Operating, Inc.  
2901 W Kingsley Rd.  
Garland, Texas 75041  
Phone No.: 1-888-396-0422  
CHEMTREC Phone No.: 1-800-424-9300

**HAZARD RATING**

Health	1	0 = Insignificant
Fire:	0	1 = Slight
Reactivity:	0	2 = Moderate
Special:	--	3 = High
Toxicity:	1	4 = Extreme

**Product Description:** R-134a Refrigerant with UV Leak Detection Dye, 12.3 oz.

**Part Number:** 334

**MSDS Date:** 5/07/2010

## SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

No.	Description	CAS Reg. No.	Units	Amount
1	1,1,1,2-Tetrafluoroethane	811-97-2	% vol	90-98
2	Polyalkylene glycol monobutyl ether	N/A	% vol	0-3
3	Leak Sealer	N/A	% vol	0-1
4	UV Dye	N/A	% vol	0-1

## SECTION 3: HAZARDS INFORMATION

**Portals of Entry:** Inhalation, ingestion, eye contact, skin contact, and dermal absorption.

**Inhalation:** Inhalation of high vapor concentrations can cause anesthetic effects including dizziness, weakness, nausea, and unconsciousness. It can act as an asphyxiant by limiting available oxygen. Very high doses can cause abnormal heart rhythm which is potentially fatal. Breathing high concentration vapors or prolonged breathing vapors can cause irritation of the nose, throat, and lungs as well as headaches, drowsiness, and fatigue. Extreme inhalation can cause loss of coordination and unconsciousness.

**Eye Contact:** Liquid splashes or vapor spray may cause freeze burns. Vapors can cause eye irritation.

**Skin Contact:** Vapor spray can cause freeze burns. Product can cause eye irritations.

**Ingestion:** Most of the product is a gas at Standard Temperature and Pressure (STP) which would not allow much of the product to be ingested. The liquid material at STP could cause nausea, gastrointestinal disturbances, headaches, drowsiness, vertigo, and dizziness.

**Delayed Effects:** Prolonged and repeated overexposure can cause irritation of the respiratory tract and mucous membranes, and kidney effects.

### HEALTH EFFECTS FROM OVEREXPOSURE:

**Primary Routes of Exposure:** Skin and inhalation.

#### **SECTION 4: FIRST AID MEASURES**

**Inhalation:** Inhalation under normal exposure should not cause problems; however if inhalation has resulted in symptoms, move patient to fresh air. If breathing is difficult, give oxygen. Give artificial respiration if breathing has stopped. Get prompt medical attention.

**Eye Contact:** Immediately flush eyes with a large amount of water for at least 15 minutes. If symptoms exist and/or persist, get prompt medical attention.

**Skin Contact:** Wash affected skin areas thoroughly with soap and water. Remove contaminated clothing. If skin irritation persists, see a physician.

**Ingestion:** If swallowed, give large quantities of water to drink. Induce vomiting. Careful gastric lavage may be indicated. Immediately see a physician. Never give anything by mouth nor induce vomiting of an unconscious person.

#### **SECTION 5: FIRE FIGHTING MEASURES**

**Unusual Hazards:** Toxic fumes are generated when material is exposed to fire and fire conditions.

**Extinguishing Agents:** Use the following extinguishing media when fighting fires involving this material: polar solvent foam, carbon dioxide, dry chemical, and water spray.

**Personal Protective Equipment:** Wear self-contained breathing apparatus and full protective gear.

**Special Precautions:** Use water spray to cool large containers exposed to fire. Vapors are denser than air and will have a tendency to accumulate in lower areas which can cause the vapors to concentrate and suffocate. The relatively small part of the product that is liquid at STP can be flammable. If the product's liquid portion is exposed to fire, extinguish with polar solvent foam, carbon dioxide, dry chemical, and water spray.

#### **FIRE AND EXPLOSIVE PROPERTIES:**

Flash Point (°C): Non-Flammable at STP

Auto-Ignition Temperature (°C): >350

Lower Explosive Limit (°C): Non-Flammable at STP

Upper Explosive Limit (°C): Non-Flammable at STP

#### **SECTION 6: ACCIDENTAL SPILL OR LEAK RELEASE INFORMATION**

**Personal Protection:** Appropriate protective equipment must be worn when handling a large spill of this material. See the PERSONAL PROTECTION MEASURES Section for recommendations. If exposed to material during clean-up operations, see the FIRST AID PROCEDURES Section for actions to follow.

**Procedures:** Evacuate the spill area. Floor may be slippery if non-volatile components in product (< 3 % volume) have wetted the floor; use care to avoid falling. Ventilate the spill area. Avoid breathing vapor. Contain non-volatile material spills immediately with inert adsorption materials. Transfer liquids and solid adsorption materials and diking material to separate suitable containers for recovery or disposal.

**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

## SECTION 7: HANDLING AND STORAGE

**Storage Conditions:** Store in a cool, well ventilated place. Keep containers dry. Store product away from reactive and corrosive materials. The minimum recommended storage temperature for this material is -29° C/ -20° F. The maximum storage temperature is 49° C/ 120° F.

**Handling Procedures:** Avoid causing and inhaling high concentrations of vapor. The vapor concentration levels in air need to be kept below occupational exposure limits and kept as low as practicable. Do not mix product with air or oxygen under pressure. Avoid exposure of product to flame or very hot surfaces. Vapors can be evolved when material is being used in processing operations. See FACILITY CONTROL MEASURES Section for types of ventilation required.

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

**Respiratory Protection:** A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. If respiratory protection is needed, use, MSHA-NIOSH approved respirator for organic vapors. None required if airborne concentrations are maintained below the TWA/TLV's listed in the COMPONENT EXPOSURE INFORMATION Section.

Up to 10 times the TWA/TLV: Wear a half-mask, air purifying respirator.

Up to 1000 ppm organic vapor: Wear an approved full-face piece, air-purifying respirator.

Above 1000 ppm organic vapor or unknown: Wear an approved positive pressure mode, or an approved full-face piece airline respirator in the positive pressure mode with emergency escape provisions.

Air purifying respirators should be equipped with organic vapor cartridges.

**Eye Protection:** Use eye goggles and/or face shield.

**Hand Protection:** The gloves listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection: Polyvinyl alcohol and Viton.

Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough.

**Other Protection:** Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.

### FACILITY CONTROL MEASURES:

**Ventilation:** Use normal local exhaust ventilation with a minimum capture velocity of 100 ft/min (0.5 m/sec) at the point of vapor evolution.

**Other Protective Equipment:** Facilities storing and utilizing this material should be equipped with an eyewash facility and a safety shower.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**TYPICAL PHYSICAL PROPERTIES:**

<b>PROPERTY</b>	<b>METRIC UNITS</b>	<b>ENGLISH UNITS</b>
Appearance:	Product in Aerosol Container	Product in Aerosol Container
Color:	Green	Green
State:	Liquid under Gas Pressure	Liquid under Gas Pressure
Odor Characteristics:	Ethereal	Ethereal
Viscosity (CP @ 20° C); [CP @ 68° F]:	20	20
Specific Gravity (d/do 4°C); [d/do 39°F]	1.225	1.225
Vapor Density (Air = 1.0):	3.3	3.3
Vapor Pressure (mm Hg @ 20° C); [psia]:	4268	85.6
Melting Point (°C); [°F]:	Extremely Low; < -26 °C	Extremely Low; < -15 °F
Boiling Point (°C); [°F]:	-26.5	-15.7
Solubility in Water (% Weight)	3	3
Evaporation Rate (n-butyl acetate = 1.0):	> 120	> 120
pH (product or water extract)	< 7	< 7
Percent Volatility (% wt):	97	97

**SECTION 10: STABILITY AND REACTIVITY**

**Stability:** Stable under normal conditions.

**Hazardous Decomposition Products:** Thermal decomposition may yield toxic decomposition products which include alkyl low molecular weight components, organic chlorides, COx, SOx, NOx, POx, hydrochloric acid, hydrofluoric acid, organic pyrolytic components, and phosgene.

**Hazardous Polymerization:** Product will not undergo polymerization.

**Incompatibility:** Avoid contact with strong oxidizing and reducing agents, fine particulate metals, magnesium and alloy containing more than 2 percent magnesium. Product can react under certain conditions with alkali or alkali earth metals such as sodium, potassium or barium and other Group IA and IIA of the Periodic Table of Elements.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**COMPONENT EXPOSURE INFORMATION:**

Component Information:

No.	Description	CAS Reg. No.	Units	Amount
1	1,1,1,2-Tetrafluoroethane	811-97-2	% vol	80-95
2	Polyalkylene glycol monobutyl ether	N/A	% vol	0-10
3	Leak Sealer	N/A	% vol	0-1
4	UV Dye (Naphthalimide Base)	N/A	% vol	0-1

Exposure Information for Specific Component:

No.	Health		Component Units	OSHA		ACGIH			
	Rating	Flammable Rating		TWA	STEL	TWA	STEL	IDLH	HAP
1	1	0	ppm	1000	NA	NA	NA	NA	No
2	1	1	ppm	NA	NA	NA	NA	NA	No
3	2	0	ppm	75	150	50	75	5,000	Yes
4	1	0	ppm	NA	NA	NA	NA	NA	No

NA: Not Available/Non Hazardous; ppm: parts per million

Note: 1 ppm equals 3.8 mg/m<sup>3</sup>; 5 ppm equals 19 mg/m<sup>3</sup>; 10 ppm equals 38 mg/m<sup>3</sup>; 100 ppm equals 380 mg/m<sup>3</sup>.

**SECTION 12: ECOLOGICAL INFORMATION**

**Persistence and Degradation:** Decomposes comparatively rapidly in the lower atmosphere (troposphere). Atmospheric lifetime is 15.6 years. Products of decomposition will be highly dispersed and hence will have a very low concentration. It is not a significant contributor to photochemical smog and is not considered to be a VOC. It is not considered as an ozone depleting chemical.

**SECTION 13: DISPOSAL INFORMATION**

**WASTE DISPOSAL:** *For disposal, dispose this material at a facility that complies with local, state, and federal regulations.*

**SECTION 14: TRANSPORTATION INFORMATION**

**DOT Hazard Description:**

**Proper Shipping Name:** CONSUMER COMMODITY

**Hazard Class:** ORM-D

**Identification Number:** NA

**Packing Group:** NA

**Hazardous Substance (RQ):** NA



**I**

**SECTION 15: REGULATORY INFORMATION**

EPA Regulation:

SARA SECTION 355/370, and 372: This product does not contain any chemicals subject to reporting requirements of SARA 313.

All components of this product are on the TSCA list.

State Regulations: This product meets requirements of Southern California AQMD Rule 443.1 and Similar Regulations California Proposition 65: This product contains the following chemical known to the State of California to cause cancer: None.

**SECTION 16: OTHER INFORMATION**

All information, recommendations, and suggestions made by IDQ, Inc. ("Company") appearing herein concerning our product are based upon tests and data believed to be reliable. However, because of the variable characteristics of analytical procedures and samples, and the inability to control its customers' uses of the information and recommendations, or the related products or materials, Company makes NO WARRANTY, EXPRESS OR IMPLIED as to the accuracy of the information or recommendations or that such are fit for any general or specific purpose, whatsoever. Company shall have NO LIABILITY arising from the use by its customers or any third parties of the information and recommendations, and it shall be each customer's sole responsibility to determine the suitability for its own use of any information or recommendations provided by Company.

# Material Safety Data Sheet

Issuing Date No data available

Revision Date 27-Nov-2013

Revision Number 2

Page 1 / 6

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Poulan Bar and Chain Oil

**Recommended Use** Bar and Chain Saw Lubricant.

**Supplier Address**

Spectrum Corporation  
500 Industrial Park Drive  
Selmer  
Tennessee  
38375  
US  
Phone:7316454937  
Fax:7316458719  
Contact:Valeria Smith Wedley  
Email:vswedley@spectrumcorporation.com  
Contact Phone7316454937

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

May cause skin, eye, and respiratory tract irritation  
Aspiration hazard if swallowed - can enter lungs and cause damage

**Appearance** Amber

**Physical State** Oil, Liquid.

**Odor** Petroleum like

**Potential Health Effects**

**Principle Routes of Exposure** Inhalation. Skin contact. Eye contact.

**Acute Toxicity**

**Eyes**

May cause irritation.

**Skin**

May cause skin irritation and/or dermatitis.

**Inhalation**

Inhalation of vapors in high concentration may cause irritation of respiratory system.

**Ingestion**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.

**Chronic Effects**

Based on OSHA 1910.1200 and IARC study requirements, this product does not require labeling. Meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346. NTP and OSHA do not list this product as a potential carcinogen.

**Aggravated Medical Conditions**

Skin disorders.

**Environmental Hazard**

See Section 12 for additional Ecological Information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
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Petroleum distillates, hydrotreated heavy naphthenic	64742-52-5	60-100
Residual oils (petroleum), hydrotreated	64742-57-0	5-10

#### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if symptoms occur
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air. Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	Aspiration hazard if swallowed - can enter lungs and cause damage. Do NOT induce vomiting. If vomiting occurs, lean victim forward to reduce the risk of aspiration. Call a physician or Poison Control Center immediately.
<b>Notes to Physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Combustible liquid.
<b>Flash Point</b>	218C / 424F
<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Uniform Fire Code</b>	Combustible Liquid: III-B
<b>Hazardous Combustion Products</b>	Carbon oxides.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	No.
<b>Sensitivity to Static Discharge</b>	Yes.

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<b>NFPA</b>	<b>Health Hazard</b> 1	<b>Flammability</b> 1	<b>Stability</b> 0	<b>Physical and Chemical Hazards</b> -
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#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing. Take precautionary measures against static discharges.
<b>Environmental Precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Cleaning Up</b>	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Wear personal
-----------------	--

## 7. HANDLING AND STORAGE

protective equipment. Avoid contact with skin, eyes and clothing. Take precautionary measures against static discharges.

### Storage

Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

### Engineering Measures

Showers  
Eyewash stations  
Ventilation systems

### Personal Protective Equipment

#### Eye/Face Protection

Tightly fitting safety goggles.

#### Skin and Body Protection

Wear protective gloves/clothing.

#### Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Amber.	<b>Odor</b>	Petroleum like.
<b>Odor Threshold</b>	No information available	<b>Physical State</b>	Oil Liquid
<b>pH</b>	UNKNOWN		
<b>Flash Point</b>	424F / 218C	<b>Autoignition Temperature</b>	No information available
<b>Decomposition Temperature</b>	No information available	<b>Boiling Point/Range</b>	No information available
<b>Melting Point/Range</b>	No information available		
<b>Flammability Limits in Air</b>	No information available	<b>Explosion Limits</b>	No information available
<b>Water Solubility</b>	Insoluble	<b>Solubility</b>	No information available
<b>Evaporation Rate</b>	No information available	<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available	<b>Partition Coefficient: n-octanol/water</b>	

## 10. STABILITY AND REACTIVITY

### Stability

Stable under recommended storage conditions.

### Incompatible Products

Oxidizing agents.

### Conditions to Avoid

Keep away from open flames, hot surfaces and sources of ignition.

### Hazardous Decomposition Products

Carbon oxides.

### Hazardous Polymerization

Hazardous polymerization does not occur.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

## Page 4 / 6

**Product Information****Chronic Toxicity****Chronic Toxicity**

Contains a known or suspected carcinogen

**Carcinogenicity**

Based on OSHA 1910.1200 and IARC study requirements, this product does not require labeling. Meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346. NTP and OSHA do not list this product as a potential carcinogen.

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Petroleum distillates, hydrotreated heavy naphthenic		LC50: > 5000 mg/L (96 h ) Oncorhynchus mykiss		EC50: > 1000 mg/L (48 h ) Daphnia magna

**13. DISPOSAL CONSIDERATIONS****Waste Disposal Methods**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging**

Dispose of in accordance with local regulations.

**California Hazardous Waste Codes**

221

**14. TRANSPORT INFORMATION****DOT** NOT REGULATED**TDG** Not regulated**MEX** Not regulated**ICAO** Not regulated**IATA** Not regulated**IMDG/IMO** Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

TSCA	Complies
DSL	Not determined

### U.S. Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### **U.S. State Regulations**

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### **U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations.

### **International Regulations**

Mexico - Grade	Slight risk, Grade 1
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#### **Canada**

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.**

#### **WHMIS Hazard Class**

Not classified

## 16. OTHER INFORMATION

**16. OTHER INFORMATION**

<b>Prepared By</b>	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
<b>Revision Date</b>	27-Nov-2013
<b>Revision Note</b>	No information available

**General Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of Safety Data Sheet**

# Material Safety Data Sheet

Issuing Date No data available

Revision Date 27-Nov-2013

Revision Number 2

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## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** POULAN POULAN PRO WEED EATER SYNTHETIC BLEND ENGINE OIL

**Recommended Use** 2 Cycle Engine Oil.

**Supplier Address**

Spectrum Corporation  
500 Industrial Park Drive  
Selmer  
Tennessee  
38375  
US  
Phone:7316454937  
Fax:7316458719  
Contact:Valeria Smith Wedley  
Email:vswedley@spectrumcorporation.com  
Contact Phone7316454937

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

May cause skin, eye, and respiratory tract irritation  
Aspiration hazard if swallowed - can enter lungs and cause damage

**Appearance** Green

**Physical State** Oil, Liquid.

**Odor** Petroleum like

**Potential Health Effects**

**Principle Routes of Exposure** Inhalation. Skin contact. Eye contact.

**Acute Toxicity**

**Eyes**

May cause irritation.

**Skin**

May cause skin irritation and/or dermatitis.

**Inhalation**

Inhalation of vapors in high concentration may cause irritation of respiratory system.

**Ingestion**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.

**Chronic Effects**

No known effect based on information supplied.

**Aggravated Medical Conditions**

Skin disorders.

**Environmental Hazard**

See Section 12 for additional Ecological Information.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	60-100
Petroleum distillates, hydrotreated light	64742-47-8	15-40



Polybutene	9003-29-6	10-30
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#### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if symptoms occur
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air. Get medical attention immediately if symptoms occur.
<b>Ingestion</b>	Aspiration hazard if swallowed - can enter lungs and cause damage. Do NOT induce vomiting. If vomiting occurs, lean victim forward to reduce the risk of aspiration. Call a physician or Poison Control Center immediately.
<b>Notes to Physician</b>	Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Combustible liquid.
<b>Flash Point</b>	218C / 424F
<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Uniform Fire Code</b>	Combustible Liquid: III-B
<b>Hazardous Combustion Products</b>	Carbon oxides.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	No.
<b>Sensitivity to Static Discharge</b>	Yes.

#### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

<b>NFPA</b>	<b>Health Hazard 1</b>	<b>Flammability 1</b>	<b>Stability 0</b>	<b>Physical and Chemical Hazards -</b>
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#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing. Take precautionary measures against static discharges.
<b>Environmental Precautions</b>	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Cleaning Up</b>	Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Wear personal
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**7. HANDLING AND STORAGE**

protective equipment. Avoid contact with skin, eyes and clothing. Take precautionary measures against static discharges.

**Storage**

Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	TWA: 5 mg/m3, as oil mist, mineral STEL: TWA: 10 mg/m3, as oil mist, mineral	TWA: 5 mg/m3, as oil mist, mineral	
Petroleum distillates, hydrotreated light 64742-47-8	TWA: 5 mg/m3 STEL: 10 mg/m3 (as oil mist)	TWA: 5 mg/m3 (as oil mist)	

ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH: Immediately Dangerous to Life or Health.

**Engineering Measures**

Showers  
Eyewash stations  
Ventilation systems

**Personal Protective Equipment**

**Eye/Face Protection**  
**Skin and Body Protection**  
**Respiratory Protection**

Tightly fitting safety goggles.  
Wear protective gloves/clothing.  
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Green.	<b>Odor</b>	Petroleum like.
<b>Odor Threshold</b>	No information available	<b>Physical State</b>	Oil Liquid
<b>pH</b>	UNKNOWN		
<b>Flash Point</b>	424F / 218C	<b>Autoignition Temperature</b>	No information available
<b>Decomposition Temperature</b>	No information available	<b>Boiling Point/Range</b>	No information available
<b>Melting Point/Range</b>	No information available		
<b>Flammability Limits in Air</b>	No information available	<b>Explosion Limits</b>	No information available
<b>Water Solubility</b>	Insoluble	<b>Solubility</b>	No information available
<b>Evaporation Rate</b>	No information available	<b>Vapor Pressure</b>	No data available
<b>Vapor Density</b>	No data available	<b>Partition Coefficient: n-octanol/water</b>	

**10. STABILITY AND REACTIVITY**

**Stability**

Stable under recommended storage conditions.

**Incompatible Products**

Oxidizing agents.

**Conditions to Avoid** Keep away from open flames, hot surfaces and sources of ignition.

**Hazardous Decomposition Products** Carbon oxides.

**Hazardous Polymerization** Hazardous polymerization does not occur.

### 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**

**Product Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Petroleum distillates, hydrotreated light	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 5.2 mg/L ( Rat ) 4 h

**Chronic Toxicity**

**Chronic Toxicity** No known effect based on information supplied.

**Carcinogenicity** Based on OSHA 1910.1200 and IARC study requirements, this product does not require labeling. Meets EU requirement of less than 3% (w/w) DMSO extract for total polycyclic aromatic compound (PAC) using IP 346. NTP and OSHA do not list this product as a potential carcinogen.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Petroleum distillates, hydrotreated heavy paraffinic		LC50: > 5000 mg/L (96 h ) Oncorhynchus mykiss		EC50: > 1000 mg/L (48 h ) Daphnia magna
Petroleum distillates, hydrotreated light		LC50: 45 mg/L (96 h flow-through) Pimephales promelas LC50: 2.4 mg/L (96 h static) Oncorhynchus mykiss LC50: 2.2 mg/L (96 h static) Lepomis macrochirus		LC50: 4720 mg/L (96 h ) Den-dronereides heteropoda

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated Packaging** Dispose of in accordance with local regulations.

**California Hazardous Waste Codes** 221

## 14. TRANSPORT INFORMATION

<u>DOT</u>	NOT REGULATED
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG/IMO</u>	Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

TSCA	Complies
DSL	Not determined

### U.S. Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### U.S. State Regulations

#### California Proposition 65

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations.

**International Regulations**

**Mexico - Grade** Slight risk, Grade 1

**Canada**

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.**

**WHMIS Hazard Class**

Not classified

**16. OTHER INFORMATION**

**Prepared By** Product Stewardship  
23 British American Blvd.  
Latham, NY 12110  
1-800-572-6501

**Revision Date** 27-Nov-2013

**Revision Note** No information available

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**End of Safety Data Sheet**



# PCMO Motor Oil

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Version: PCMO.001

### SECTION 1: IDENTIFICATION

#### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** CAM2 SuperPro Max, PROTECT 75 High Mileage, Blue Blood Racing Oil, Blue Blood Break-In Oil

**Product Grades:** 5W-20, 5W-30, 10W-30, 10W-40, 20W-50, SAE 30, SAE 40, SAE 50, SAE NITRO 70

**Synonyms:** Engine Oil

#### 1.2. Intended Use of the Product

Engine Oil.

#### 1.3. Name, Address, and Telephone of the Responsible Party

##### Company

CAM2 International, LLC

683 Haining Road

Vicksburg, MS 39183

(800) 338-2262

www.CAM2.com

#### 1.4. Emergency Telephone Number

**Emergency Number** : 1-800-633-8253

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

**Classification (GHS-US)**

Not Classified

Full text of H-phrases: see section 16

#### 2.2. Label Elements

**GHS-US Labeling**

**Hazard Pictograms (GHS-US)** : Not Classified

**Signal Word (GHS-US)** :

**Hazard Statements (GHS-US)** : None Required

**Precautionary Statements (GHS-US)** : P273 - Avoid release to the environment.  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

#### 2.3. Other Hazards

The mixture consists of substances capable of producing an aspiration hazard. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure, and even death.

#### 2.4. Unknown Acute Toxicity (GHS-US)

None of the mixture consists of ingredient(s) of unknown acute toxicity.



# PCMO Motor Oil

## Safety Data Sheet

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substances

Not applicable

#### 3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Petroleum distillates, solvent dewaxed	(CAS No) 64742-65-0	75.75 – 95, 64 - 85	Not Classified
heavy paraffinic, Distillates, petroleum, hydrotreated heavy paraffinic	(CAS No) 64742-54-7	0 – 11, 10 - 17	Not Classified
Paraffin oils*	(CAS No) 8012-95-1	0 - 0.1, 0.1- 1, 1 - 5	Not Classified
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	(CAS No) 68649-42-3	0.45 - 0.891	Aquatic Chronic 3, H402

\*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

\*More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Full text of H-phrases: see section 16

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

#### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** No known significant effects or critical hazards.

**Inhalation:** Overexposure may be irritating to the respiratory system.

**Skin Contact:** Repeated or prolonged skin contact may cause irritation.

**Eye Contact:** Direct contact with the eyes is likely irritating.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** No known significant effects or critical hazards.

#### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

### SECTION 5: FIRE-FIGHTING MEASURES

#### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

#### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable but will support combustion.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.



# PCMO Motor Oil

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Version: PCMO.001

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Under fire conditions, may produce fumes, smoke, oxides of carbon and hydrocarbons.

**Other Information:** Refer to Section 9 for flammability properties.

#### Reference to Other Sections

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers.

### 7.3. Specific End Use(s)

Engine Oil .

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.



# PCMO Motor Oil

## Safety Data Sheet

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Version: PCMO.001

Paraffin oils (8012-95-1)		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (excluding metal working fluids, highly & severely refined-inhalable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen highly and severely refined, Suspected Human Carcinogen highly and severely refined
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	2500 mg/m <sup>3</sup>
Alberta	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Alberta	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
British Columbia	OEL TWA (mg/m <sup>3</sup> )	0.2 mg/m <sup>3</sup> (mildly refined) 1 mg/m <sup>3</sup> (severely refined)
Manitoba	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (excluding metal working fluids, highly & severely refined-inhalable fraction)
New Brunswick	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
New Brunswick	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (as sampled by a method that does not collect vapor)
Newfoundland & Labrador	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (excluding metal working fluids, highly & severely refined-inhalable fraction)
Nova Scotia	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (excluding metal working fluids, highly & severely refined-inhalable fraction)
Nunavut	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Nunavut	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Northwest Territories	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Northwest Territories	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Ontario	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (pure, highly and severely refined, excluding metal working fluids-inhalable)
Prince Edward Island	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (excluding metal working fluids, highly & severely refined-inhalable fraction)
Québec	VECD (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (mist)
Québec	VEMP (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (mist)
Saskatchewan	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Saskatchewan	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
Yukon	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
Yukon	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>

## 8.2. Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Protective goggles. Gloves. Insufficient ventilation: wear respiratory protection.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical goggles or safety glasses.

**Skin and Body Protection:** Wear suitable protective clothing.



# PCMO Motor Oil

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Version: PCMO.001

**Respiratory Protection:** Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

**Environmental Exposure Controls:** Do not allow the product to be released into the environment.

**Consumer Exposure Controls:** Do not eat, drink or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Amber
Odor	: Slight Hydrocarbon
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Boiling Point	: 280 °C (536 °F)
Flash Point	: 400 °C (COC) (752 °F)
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: 0.85
Solubility	: Negligible
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Viscosity, Kinematic	: 50 mm <sup>2</sup> /s @ 40 °C
Explosive Properties	: Product is not explosive
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- 10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Thermal decomposition generates : carbon oxides (CO, CO<sub>2</sub>). Hydrocarbons.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified



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**Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not classified

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Overexposure may be irritating to the respiratory system.

**Symptoms/Injuries After Skin Contact:** Repeated or prolonged skin contact may cause irritation.

**Symptoms/Injuries After Eye Contact:** Direct contact with the eyes is likely irritating.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** Not Classified

### 11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

<b>Paraffin oils (8012-95-1)</b>	
LC50 Inhalation Rat	2062 ppm/4h
ATE US (gases)	2,062.00 ppmV/4h
<b>Heavy paraffinic, Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)</b>	
LD50 Oral Rat	> 2000 mg/kg
LD50 Dermal Rabbit	> 2 g/kg
<b>Petroleum distillates, solvent dewaxed (64742-65-0)</b>	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 5 g/kg
<b>Paraffin oils (8012-95-1)</b>	
IARC Group	1

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

Ecology - General: Toxic to aquatic life.

<b>Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)</b>	
LC50 Fish 1	1.0 - 5.0 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	1 - 1.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	10.0 - 35.0 mg/l (Exposure time: 96 h - Species: Pimephales promelas [semi-static])
<b>Petroleum distillates, solvent dewaxed (64742-65-0)</b>	
EC50 Daphnia 1	> 1000 mg/L (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
<b>Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)</b>	
LC50 Fish 1	> 5000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	> 1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)

### 12.2. Persistence and Degradability

Not available

### 12.3. Bioaccumulative Potential

Not available

### 12.4. Mobility in Soil

Not available

### 12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS



# PCMO Motor Oil

## Safety Data Sheet

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### 13.1. Waste treatment methods

**Sewage Disposal Recommendations:** Do not empty into drains; dispose of this material and its container in a safe way. Do not empty into drains. Do not dispose of waste into sewer.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

## SECTION 14: TRANSPORT INFORMATION

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

**14.4. In Accordance with TDG** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard
-------------------------------------	---------------------------------

### 15.2. US State Regulations

<b>Paraffin oils (8012-95-1)</b>
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

### 15.3. Canadian Regulations

WHMIS Classification	Not Classified
<b>Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
<b>Paraffin oils (8012-95-1)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
<b>Petroleum distillates, solvent dewaxed (64742-65-0)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
<b>Distillates, petroleum, hydrotreated heavy paraffinic (64742-54-7)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 05/16/2015

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

H402	Harmful to aquatic life.
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P273	Avoid release into the environment.
P501	Dispose of contents/container in accordance with local, regional, national, and international regulations.

### Party Responsible for the Preparation of This Document

CAM2 International, LLC  
683 Haining Road  
Vicksburg, MS 39183  
(800) 338-2262  
www.CAM2.com

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

North America GHS US 2012 & WHMIS 2



THE UNIVERSITY OF THE SOUTH PACIFIC  
SCHOOL OF DISTANCE EDUCATION  
BACHELOR OF BUSINESS ADMINISTRATION  
FINANCIAL ACCOUNTING

Question 9

1. The following information relates to the operations of a company during the year ended 31 December 2019:

Revenue	1,000,000
Cost of sales	(400,000)
Operating expenses	(200,000)
Depreciation	50,000
Interest expense	20,000
Income tax expense	30,000

2. The following information relates to the operations of a company during the year ended 31 December 2019:

Revenue	1,000,000	
Cost of sales	(400,000)	
Operating expenses	(200,000)	
Depreciation	50,000	
Interest expense	20,000	
Income tax expense	30,000	
Dividend income		100,000
Interest income		20,000

3. The following information relates to the operations of a company during the year ended 31 December 2019:

Revenue	1,000,000
Cost of sales	(400,000)
Operating expenses	(200,000)
Depreciation	50,000
Interest expense	20,000
Income tax expense	30,000
Dividend income	100,000
Interest income	20,000

Question 9

# 1. Introduction

Section 1.1

1.1.1. Introduction

Section 1.2

**1.2.1. Introduction**

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**1.2.2. Introduction**

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**1.2.3. Introduction**

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- 1.2.3.1.20. Introduction



Hand hygiene and PPE

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THE UNIVERSITY OF THE SOUTH PACIFIC  
SCHOOL OF DISTANCE EDUCATION  
DEPARTMENT OF EDUCATION

English Language

Write a paragraph on the topic: **My favourite sport**

Write a paragraph on the topic: **My favourite sport**

Write a paragraph on the topic: **My favourite sport**

Write a paragraph on the topic: **My favourite sport**

English Language



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# SAFETY DATA SHEET

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

### PRODUCT

**Product Name:** CAT TRANSMISSION AND DRIVE TRAIN OIL (TDTO) 30  
**Product Description:** Base Oil and Additives  
**Product Code:** 20202050B050, 564666-00, 971420  
**Intended Use:** Manual transmission fluid

### COMPANY IDENTIFICATION

**Supplier:** EXXON MOBIL CORPORATION  
3225 GALLOWS RD.  
FAIRFAX, VA. 22037 USA

**24 Hour Health Emergency:** 609-737-4411  
**Transportation Emergency Phone:** 800-424-9300 or 703-527-3887 CHEMTREC  
**Product Technical Information:** 800-662-4525  
**MSDS Internet Address:** <http://www.exxon.com>, <http://www.mobil.com>

## SECTION 2 HAZARDS IDENTIFICATION

This material is not hazardous according to regulatory guidelines (see (M)SDS Section 15).

### Other hazard information:

**HAZARD NOT OTHERWISE CLASSIFIED (HNOC):** None as defined under 29 CFR 1900.1200.

### PHYSICAL / CHEMICAL HAZARDS

No significant hazards.

### HEALTH HAZARDS

High-pressure injection under skin may cause serious damage. Excessive exposure may result in eye, skin, or respiratory irritation.

### ENVIRONMENTAL HAZARDS

No significant hazards.

<b>NFPA Hazard ID:</b>	Health: 0	Flammability: 1	Reactivity: 0
<b>HMIS Hazard ID:</b>	Health: 0	Flammability: 1	Reactivity: 0

**NOTE:** This material should not be used for any other purpose than the intended use in Section 1 without expert

Product Name: CAT TRANSMISSION AND DRIVE TRAIN OIL (TDTO) 30

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advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

#### Hazardous Substance(s) or Complex Substance(s) required for disclosure

Name	CAS#	Concentration*	GHS Hazard Codes
CALCIUM SULFONATE		0.1 - < 1%	H317
TETRAPROPENYL PHENOL	121158-58-5	0.1 - < 1%	H315, H361(F), H400(M factor 1), H410(M factor 1)
ZINC ARYLDITHIOPHOSPHATE	98073-07-5	1 - < 5%	H320(2B), H402, H412

\* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

### SECTION 4 FIRST AID MEASURES

#### INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

#### SKIN CONTACT

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

#### EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

#### INGESTION

First aid is normally not required. Seek medical attention if discomfort occurs.

### SECTION 5 FIRE FIGHTING MEASURES

#### EXTINGUISHING MEDIA

**Appropriate Extinguishing Media:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.



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**Inappropriate Extinguishing Media:** Straight Streams of Water

## **FIRE FIGHTING**

**Fire Fighting Instructions:** Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

**Hazardous Combustion Products:** Incomplete combustion products, Aldehydes, Oxides of carbon, Smoke, Fume, Sulfur oxides

## **FLAMMABILITY PROPERTIES**

**Flash Point [Method]:** >218°C (424°F) [ASTM D-92]

**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0

**Autoignition Temperature:** N/D

## **SECTION 6**

## **ACCIDENTAL RELEASE MEASURES**

### **NOTIFICATION PROCEDURES**

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

### **PROTECTIVE MEASURES**

Avoid contact with spilled material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: respiratory protection will be necessary only in special cases, e.g., formation of mists. Half-face or full-face respirator with filter(s) for dust/organic vapor or Self Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to hydrocarbons are recommended. Gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

### **SPILL MANAGEMENT**

**Land Spill:** Stop leak if you can do it without risk. Recover by pumping or with suitable absorbent.

**Water Spill:** Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

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## ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

## SECTION 7

## HANDLING AND STORAGE

### HANDLING

Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

**Static Accumulator:** This material is a static accumulator.

### STORAGE

The container choice, for example storage vessel, may effect static accumulation and dissipation. Do not store in open or unlabelled containers. Keep away from incompatible materials.

## SECTION 8

## EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure limits/standards for materials that can be formed when handling this product:** When mists/aerosols can occur the following are recommended: 5 mg/m<sup>3</sup> - ACGIH TLV (inhalable fraction), 5 mg/m<sup>3</sup> - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

No biological limits allocated.

### ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

No special requirements under ordinary conditions of use and with adequate ventilation.

### PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

**Respiratory Protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection,

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use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

**Hand Protection:** Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

No protection is ordinarily required under normal conditions of use.

**Eye Protection:** If contact is likely, safety glasses with side shields are recommended.

**Skin and Body Protection:** Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.

**Specific Hygiene Measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

## ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

## SECTION 9

## PHYSICAL AND CHEMICAL PROPERTIES

**Note:** Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

## GENERAL INFORMATION

**Physical State:** Liquid

**Color:** Amber

**Odor:** Characteristic

**Odor Threshold:** N/D

## IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

**Relative Density (at 15 °C):** 0.893

**Flammability (Solid, Gas):** N/A

**Flash Point [Method]:** >218°C (424°F) [ASTM D-92]

**Flammable Limits (Approximate volume % in air):** LEL: 0.9 UEL: 7.0

**Autoignition Temperature:** N/D

**Boiling Point / Range:** > 316°C (600°F)

**Decomposition Temperature:** N/D

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**Vapor Density (Air = 1):** > 2 at 101 kPa  
**Vapor Pressure:** < 0.013 kPa (0.1 mm Hg) at 20 °C  
**Evaporation Rate (n-butyl acetate = 1):** N/D  
**pH:** N/A  
**Log Pow (n-Octanol/Water Partition Coefficient):** > 3.5  
**Solubility in Water:** Negligible  
**Viscosity:** 100 cSt (100 mm<sup>2</sup>/sec) at 40 °C | 11.2 cSt (11.2 mm<sup>2</sup>/sec) at 100°C  
**Oxidizing Properties:** See Hazards Identification Section.

**OTHER INFORMATION**

**Freezing Point:** N/D  
**Melting Point:** N/A  
**Pour Point:** -18°C (0°F)  
**DMSO Extract (mineral oil only), IP-346:** < 3 %wt

<b>SECTION 10</b>	<b>STABILITY AND REACTIVITY</b>
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**REACTIVITY:** See sub-sections below.

**STABILITY:** Material is stable under normal conditions.

**CONDITIONS TO AVOID:** Excessive heat. High energy sources of ignition.

**MATERIALS TO AVOID:** Strong oxidizers

**HAZARDOUS DECOMPOSITION PRODUCTS:** Material does not decompose at ambient temperatures.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Hazardous polymerization will not occur.

<b>SECTION 11</b>	<b>TOXICOLOGICAL INFORMATION</b>
-------------------	----------------------------------

**INFORMATION ON TOXICOLOGICAL EFFECTS**

<u>Hazard Class</u>	<u>Conclusion / Remarks</u>
<b>Inhalation</b>	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data for material.	Negligible hazard at ambient/normal handling temperatures.
<b>Ingestion</b>	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
<b>Skin</b>	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin Corrosion/Irritation: No end point data for material.	Negligible irritation to skin at ambient temperatures. Based on assessment of the components.
<b>Eye</b>	
Serious Eye Damage/Irritation: No end point data for material.	May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.
<b>Sensitization</b>	

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Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material.	Not expected to be a skin sensitizer. Based on assessment of the components.
<b>Aspiration:</b> Data available.	Not expected to be an aspiration hazard. Based on physico-chemical properties of the material.
<b>Germ Cell Mutagenicity:</b> No end point data for material.	Not expected to be a germ cell mutagen. Based on assessment of the components.
<b>Carcinogenicity:</b> No end point data for material.	Not expected to cause cancer. Based on assessment of the components.
<b>Reproductive Toxicity:</b> No end point data for material.	Not expected to be a reproductive toxicant. Based on assessment of the components.
<b>Lactation:</b> No end point data for material.	Not expected to cause harm to breast-fed children.
<b>Specific Target Organ Toxicity (STOT)</b>	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: No end point data for material.	Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components.

## OTHER INFORMATION

### Contains:

Base oil severely refined: Not carcinogenic in animal studies. Representative material passes IP-346, Modified Ames test, and/or other screening tests. Dermal and inhalation studies showed minimal effects; lung non-specific infiltration of immune cells, oil deposition and minimal granuloma formation. Not sensitizing in test animals.

Tetrapropenyl phenol (TPP). TPP was tested in a rat oral gavage one-generation reproductive toxicity study and a rat dietary two-generation reproductive toxicity study. Results from the one-generation study included reduced ovary weights and changes in male reproductive accessory organs. Results from the two-generation study included prolonged estrous cyclicity, reduced ovary weights, accelerated sexual maturation, decreased mean live litter size, decreased fertility rates, hypospermia, and reduced weights of male reproductive accessory organs. A Specific Concentration Limit (SCL) for reproductive effects of 1.5 wt% TPP was derived by the supplier based on the NOAEL (15 mg/kg/day) from the rat dietary two-generation study and was confirmed in supporting studies with other substances containing TPP as an impurity.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC

3 = IARC 1

5 = IARC 2B

2 = NTP SUS

4 = IARC 2A

6 = OSHA CARC

## SECTION 12

## ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

### ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

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#### **MOBILITY**

Base oil component -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

#### **PERSISTENCE AND DEGRADABILITY**

##### **Biodegradation:**

Base oil component -- Expected to be inherently biodegradable

#### **BIOACCUMULATION POTENTIAL**

Base oil component -- Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

NOTE: One or more components of this material contain an impurity (branched alkylphenol) that is highly toxic to aquatic organisms. The components containing the impurity were tested by the supplier and found to be no more than minimally toxic to aquatic organisms.

### **SECTION 13**

### **DISPOSAL CONSIDERATIONS**

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

#### **DISPOSAL RECOMMENDATIONS**

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Protect the environment. Dispose of used oil at designated sites. Minimize skin contact. Do not mix used oils with solvents, brake fluids or coolants.

#### **REGULATORY DISPOSAL INFORMATION**

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

**Empty Container Warning** Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

### **SECTION 14**

### **TRANSPORT INFORMATION**

**LAND (DOT):** Not Regulated for Land Transport

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**LAND (TDG):** Not Regulated for Land Transport

**SEA (IMDG):** Not Regulated for Sea Transport according to IMDG-Code

**Marine Pollutant:** No

**AIR (IATA):** Not Regulated for Air Transport

<b>SECTION 15</b>	<b>REGULATORY INFORMATION</b>
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**OSHA HAZARD COMMUNICATION STANDARD:** This material is not considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

**Listed or exempt from listing/notification on the following chemical inventories:** AICS, DSL, ENCS, IECSC, KECI, PICCS, TSCA

**EPCRA SECTION 302:** This material contains no extremely hazardous substances.

**SARA (311/312) REPORTABLE HAZARD CATEGORIES:** None.

**SARA (313) TOXIC RELEASE INVENTORY:** This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
ZINC ARYLDITHIOPHOSPHATE	98073-07-5	13, 15, 17, 19

--REGULATORY LISTS SEARCHED--

- |               |                  |                   |             |
|---------------|------------------|-------------------|-------------|
| 1 = ACGIH ALL | 6 = TSCA 5a2     | 11 = CA P65 REPRO | 16 = MN RTK |
| 2 = ACGIH A1  | 7 = TSCA 5e      | 12 = CA RTK       | 17 = NJ RTK |
| 3 = ACGIH A2  | 8 = TSCA 6       | 13 = IL RTK       | 18 = PA RTK |
| 4 = OSHA Z    | 9 = TSCA 12b     | 14 = LA RTK       | 19 = RI RTK |
| 5 = TSCA 4    | 10 = CA P65 CARC | 15 = MI 293       |             |

Code key: CARC=Carcinogen; REPRO=Reproductive

<b>SECTION 16</b>	<b>OTHER INFORMATION</b>
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N/D = Not determined, N/A = Not applicable

**KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):**

H315: Causes skin irritation; Skin Corr/Irritation, Cat 2

H317: May cause allergic skin reaction; Skin Sensitization, Cat 1

H320(2B): Causes eye irritation; Serious Eye Damage/Irr, Cat 2B

H361(F): Suspected of damaging fertility; Repro Tox, Cat 2 (Fertility)

H400: Very toxic to aquatic life; Acute Env Tox, Cat 1

H402: Harmful to aquatic life; Acute Env Tox, Cat 3

H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1

H412: Harmful to aquatic life with long lasting effects; Chronic Env Tox, Cat 3

**THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:**

Updates made in accordance with implementation of GHS requirements.

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MHC: 0B, 0B, 0, 0, 0, 0

PPEC: A

DGN: 2006430XUS (548859)

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# SAFETY DATA SHEET

Chain and Cable; Chain and Cable Heavy

## Section 1. Identification

**GHS product identifier** : Chain and Cable; Chain and Cable Heavy  
**Other means of identification** : Not available.  
**Product type** : Liquid.

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Petroleum lubricating oil  
**Area of application** : Industrial applications.

**Supplier/Manufacturer** : LUBRIPLATE® Lubricants Co.  
129 Lockwood St.  
Newark, NJ 07105  
Telephone no.: 1-973-589-9150

**e-mail address of person responsible for this SDS** : SDS@lubriplate.com

**Emergency telephone number (with hours of operation)** : CHEM-TEL 1-800-255-3924 (24 hour)

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : Not classified.

### GHS label elements

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

### Precautionary statements

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Supplemental label elements** :  Avoid contact with skin and clothing.  
- Wash thoroughly after handling.

**Hazards not otherwise classified** : Prolonged or repeated contact may dry skin and cause irritation.

**Date of issue/Date of revision** : 03/16/2015 **Date of previous issue** : 03/10/2015 **Version** : 1.01 1/13

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : Not applicable.  
**Product code** : Not available.

Ingredient name	Other names	%	CAS number
Distillates (petroleum), hydrotreated heavy naphthenic	Distillates (petroleum), hydrotreated heavy naphthenic	60-100	64742-52-5
Residual oils (petroleum), solvent-dewaxed	Residual oils (petroleum), solvent-dewaxed	30-60	64742-62-7
Distillates (petroleum), hydrotreated light naphthenic	Distillates (petroleum), hydrotreated light naphthenic	10-30	64742-53-6
2-butoxyethanol	2-butoxyethanol	1-5	111-76-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.  
**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No specific data.  
**Inhalation** : No specific data.

## Section 4. First aid measures

- Skin contact** : Adverse symptoms may include the following:  
irritation  
dryness  
cracking
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
sulfur oxides  
metal oxide/oxides  
hydrogen chloride

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## Section 6. Accidental release measures

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Do not store above the following temperature: 40°C (104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy naphthenic	<p><b>ACGIH TLV (United States, 4/2014).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction</p> <p><b>NIOSH REL (United States, 10/2013).</b> TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist</p> <p><b>OSHA PEL (United States, 2/2013).</b> TWA: 5 mg/m<sup>3</sup> 8 hours.</p>
Residual oils (petroleum), solvent-dewaxed	<p><b>ACGIH TLV (United States, 4/2014).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction</p> <p><b>NIOSH REL (United States, 10/2013).</b></p>

## Section 8. Exposure controls/personal protection

Distillates (petroleum), hydrotreated light naphthenic

TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Mist  
 STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist  
**OSHA PEL (United States, 2/2013).**

TWA: 5 mg/m<sup>3</sup> 8 hours.

**ACGIH TLV (United States, 4/2014).**

TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction

**NIOSH REL (United States, 10/2013).**

TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Mist

STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist

**OSHA PEL (United States, 2/2013).**

TWA: 5 mg/m<sup>3</sup> 8 hours.

**OSHA PEL 1989 (United States, 3/1989).**

**Absorbed through skin.**

TWA: 25 ppm 8 hours.

TWA: 120 mg/m<sup>3</sup> 8 hours.

**NIOSH REL (United States, 10/2013).**

**Absorbed through skin.**

TWA: 5 ppm 10 hours.

TWA: 24 mg/m<sup>3</sup> 10 hours.

**ACGIH TLV (United States, 4/2014).**

TWA: 20 ppm 8 hours.

**OSHA PEL (United States, 2/2013).**

**Absorbed through skin.**

TWA: 50 ppm 8 hours.

TWA: 240 mg/m<sup>3</sup> 8 hours.

2-butoxyethanol

### Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

### Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

#### Skin protection

##### Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

##### Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

## Section 8. Exposure controls/personal protection

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Transparent / Oily liquid.]
- Color** : Amber.
- Odor** : Sweet.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Pour point: -40 to -23°C (-40 to -9.4°F)
- Boiling point** : >288°C (>550.4°F)
- Flash point** : Open cup: 154 to 199°C (309.2 to 390.2°F) [Cleveland.]
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Lower and upper explosive (flammable) limits** : Lower: 0.9%  
Upper: 7%
- Vapor pressure** : <0.67 kPa (<5 mm Hg) [room temperature]
- Vapor density** : <5 [Air = 1]
- Relative density** : 0.93 [Water = 1]
- Solubility** : Insoluble in the following materials: cold water and hot water.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : 177°C (350.6°F)
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): 0.32 to 1.35 cm<sup>2</sup>/s (32 to 135 cSt)
- Physical/chemical properties comments** : Kinematic viscosity (100°C (212°F)): 0.06 cm<sup>2</sup>/s to 0.15 cm<sup>2</sup>/s (6 cSt to 15 cSt)

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
Under normal conditions of storage and use, hazardous polymerization will not occur.

## Section 10. Stability and reactivity

**Conditions to avoid** : Keep away from heat, sparks and flame. Keep away from all sources of ignition.

**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.  
Chlorine

**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), hydrotreated light naphthenic	LD50 Oral	Rat	>5000 mg/kg	-
2-butoxyethanol	LC50 Inhalation Vapor	Rat	450 ppm	4 hours
	LD50 Oral	Rat	917 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Distillates (petroleum), hydrotreated heavy naphthenic 2-butoxyethanol	Skin - Severe irritant	Rabbit	-	500 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

**Conclusion/Summary** : The mineral oils in the product contain < 3% DMSO extract (IP 346).

#### Classification

Product/ingredient name	OSHA	IARC	NTP
2-butoxyethanol	-	3	-

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

## Section 11. Toxicological information

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
2-butoxyethanol	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated heavy naphthenic	ASPIRATION HAZARD - Category 1
Residual oils (petroleum), solvent-dewaxed	ASPIRATION HAZARD - Category 1
Distillates (petroleum), hydrotreated light naphthenic	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Defatting to the skin. May cause skin dryness and irritation.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
 irritation  
 dryness  
 cracking  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

### Potential chronic health effects

Not available.

**General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.  
**Carcinogenicity** : No known significant effects or critical hazards.



## Section 11. Toxicological information

<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	55263.9 mg/kg

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
2-butoxyethanol	Acute EC50 >1000 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 800000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1250000 µg/l Marine water	Fish - Menidia beryllina	96 hours

### Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Residual oils (petroleum), solvent-dewaxed	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	6 % - 28 days	-	-
2-butoxyethanol	301E Ready Biodegradability - Modified OECD Screening Test	95 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Residual oils (petroleum), solvent-dewaxed	-	-	Not readily
2-butoxyethanol	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2-butoxyethanol	0.81	<100	low

### Mobility in soil

<b>Soil/water partition coefficient (K<sub>oc</sub>)</b>	: Not available.
--	------------------

## Section 12. Ecological information

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 307:** zinc neodecanoate; Naphthenic acids, zinc salts

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

## Section 15. Regulatory information

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), hydrotreated heavy naphthenic	60-100	No.	No.	No.	Yes.	No.
Residual oils (petroleum), solvent-dewaxed	30-60	No.	No.	No.	Yes.	No.
Distillates (petroleum), hydrotreated light naphthenic	10-30	No.	No.	No.	Yes.	No.
2-butoxyethanol	1-5	Yes.	No.	No.	Yes.	No.

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	2-Butoxyethanol	111-76-2	3-7
<b>Supplier notification</b>	2-Butoxyethanol	111-76-2	3-7

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

**Massachusetts** : The following components are listed: MINERAL OIL, PETROLEUM DISTILLATES, HYDROTREATED LIGHT NAPHTHENIC; 2-BUTOXYETHANOL

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: MINERAL OIL; 2-BUTOXY ETHANOL; BUTYL CELLOSOLVE

**Pennsylvania** : The following components are listed: ETHANOL, 2-BUTOXY-

### California Prop. 65

None of the components are listed.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	*	1
Flammability		1
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

Date of issue/Date of revision	: 03/16/2015
Date of previous issue	: 03/10/2015
Version	: 1.01
Prepared by	: IHS
Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

References : HCS (U.S.A.)- Hazard Communication Standard  
International transport regulations

Indicates information that has changed from previously issued version.

### Notice to reader

## Section 16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



# SAFETY DATA SHEET

Revision Date 18-Jun-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** 122GA CHAIN LUBE 5 OZ AE

### Other means of identification

**Product Code** 80075

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Aerosol Lubricant

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

ITW Permatex  
10 Columbus Blvd.  
Hartford, CT 06106 USA

#### Distributor

ITW Permatex Canada  
35 Brownridge Road, Unit 1  
Halton Hills, ON Canada L7G 0C6  
Telephone: (800) 924-6994

**Company Phone Number** 1-87-Permatex  
(877) 376-2839

**24 Hour Emergency Phone Number** Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

**E-mail address** mail@permatex.com

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable aerosols

Category 1

### Label elements

#### **Emergency Overview**

#### **Danger**

Extremely flammable aerosol

**Appearance** Brown**Physical state** Liquid Aerosol**Odor** Mild**Precautionary Statements - Prevention**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
 Do not spray on an open flame or other ignition source  
 Pressurized container: Do not pierce or burn, even after use

**Precautionary Statements - Storage**

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

- The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0.1 % w/w 1,3-butadiene (EINECS No. 203-450-8). If the substance is not classified as a carcinogen or mutagen, at least the S-phrases (2-)9-16 (Table 3.2) should apply. This note applies only to certain complex oil-derived substances in Part 3  
 - The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex I

Unknown acute toxicity

9.9 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**substance(s)**

Chemical Name	CAS No	Weight-%	Trade Secret
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-53-6	30 - 60	*
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC	64742-52-5	10 - 30	*
PETROLEUM GASES, LIQUEFIED, SWEETENED	68476-86-8	10 - 30	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of first aid measures****General advice**

Get medical advice/attention if you feel unwell.

**Eye contact**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Skin contact**

IF ON SKIN: Wash skin with soap and water. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.

<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	IF SWALLOWED: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** See section 2 for more information.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>), Dry chemical, Foam

**Unsuitable extinguishing media**

None.

**Specific hazards arising from the chemical**

Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Contents under pressure. Remove all sources of ignition.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**



**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required. Contents under pressure. Do not puncture or incinerate cans. Remove all sources of ignition.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Do not expose to temperatures exceeding 50 °C/122 °F.

**Incompatible materials** Strong oxidizing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Physical state** Liquid; Aerosol  
**Appearance** Brown  
**Odor** Mild  
**Odor threshold** No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	No information available	
<b>Melting point / freezing point</b>	No information available	
<b>Boiling point / boiling range</b>	> 38 °C / >100 °F	
<b>Flash point</b>	No information available	Gives a flame projection at full valve opening or flashback at any degree of valve opening
<b>Evaporation rate</b>	No information available	
<b>Flammability (solid, gas)</b>	No information available	
<b>Flammability Limit in Air</b>		
<b>Upper flammability limit:</b>	No information available	
<b>Lower flammability limit:</b>	No information available	
<b>Vapor pressure</b>	No information available	
<b>Vapor density</b>	>1	Air = 1
<b>Relative density</b>	0.89	
<b>Water solubility</b>	Insoluble in water	
<b>Solubility in other solvents</b>	No information available	
<b>Partition coefficient</b>	No information available	

<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	19.2%
<b>Density</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents

**Hazardous Decomposition Products**

Carbon oxides

Aldehydes

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye contact</b>	Contact with eyes may cause irritation. May cause redness and tearing of the eyes.
<b>Skin contact</b>	May cause skin irritation and/or dermatitis.
<b>Ingestion</b>	Ingestion may cause irritation to mucous membranes.

**Information on toxicological effects****Symptoms** No information available.**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

<b>Sensitization</b>	No information available.			
<b>Germ cell mutagenicity</b>	No information available.			
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.			
<b>Chemical Name</b>	<b>ACGIH</b>	<b>IARC</b>	<b>NTP</b>	<b>OSHA</b>

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC 64742-53-6	A2	Group 1	-	X
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC 64742-52-5	A2	Group 1	-	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

30 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC 64742-53-6	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC 64742-52-5	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50

### Persistence and degradability

No information available.

### Bioaccumulation

No information available.

### Mobility

No information available.

Chemical Name	Partition coefficient
PETROLEUM GASES, LIQUEFIED, SWEETENED 68476-86-8	<=2.8

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

<b>Disposal of wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Do not reuse container.
<b>US EPA Waste Number</b>	D001

## 14. TRANSPORT INFORMATION

**DOT**

UN/ID no 1950  
 Proper shipping name: Aerosols, Limited Quantity (LQ)  
 Hazard Class 2.1  
 Emergency Response Guide Number 126

**IATA**

UN/ID no ID 8000  
 Proper shipping name: Consumer commodity  
 Hazard Class 9  
 ERG Code 9L

**IMDG**

UN/ID no 1950  
 Proper shipping name: Aerosols, Limited Quantity (LQ)  
 Hazard Class 2.1  
 EmS-No F-D, S-U

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Not Listed.
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC 64742-53-6	-	X	-

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

<b>NFPA</b>	<b>Health hazards</b> 1	<b>Flammability</b> 4	<b>Instability</b> 0	-
<b>HMIS</b>	<b>Health hazards</b> 1	<b>Flammability</b> 4	<b>Physical hazards</b> 0	<b>Personal protection</b> B

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Revision Date 18-Jun-2015

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

# Safety Data Sheet



**SECTION 1 PRODUCT AND COMPANY IDENTIFICATION**

## Chevron Supreme Motor Oil SAE 30, 40, 10W-40, 20W-50

**Product Use:** Automotive Engine Oil  
**Product Number(s):** 220002, 220011, 220059, 220060

**Company Identification**  
Chevron Products Company  
a division of Chevron U.S.A. Inc.  
6001 Bollinger Canyon Rd.  
San Ramon, CA 94583  
United States of America  
www.chevronlubricants.com

**Transportation Emergency Response**  
CHEMTREC: (800) 424-9300 or (703) 527-3887

**Health Emergency**  
Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

**Product Information**  
email : lubemsds@chevron.com  
Product Information: 1 (800) 582-3835, LUBETEK@chevron.com

**SECTION 2 HAZARDS IDENTIFICATION**

**CLASSIFICATION:** Not classified as hazardous according to 29 CFR 1910.1200 (2012).

**SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS**

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	70 - 99 %weight

**SECTION 4 FIRST AID MEASURES**

**Description of first aid measures**  
**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

**Most important symptoms and effects, both acute and delayed**

**IMMEDIATE SYMPTOMS AND HEALTH EFFECTS**

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Contact with the skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

**DELAYED OR OTHER SYMPTOMS AND HEALTH EFFECTS:** Not classified.

**Indication of any immediate medical attention and special treatment needed**

Not applicable.

**SECTION 5 FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

**PROTECTION OF FIRE FIGHTERS:**

**Fire Fighting Instructions:** This material will burn although it is not easily ignited. See Section 7 for proper handling and storage. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities as appropriate or required.

**SECTION 7 HANDLING AND STORAGE**

**Precautionary Measures:** Do not get in eyes, on skin, or on clothing. Keep out of the reach of children. Wash thoroughly after handling.

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and

drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

**GENERAL CONSIDERATIONS:**

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**ENGINEERING CONTROLS:**

Use in a well-ventilated area.

**PERSONAL PROTECTIVE EQUIPMENT**

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: 4H (PE/EVAL), Nitrile Rubber, Silver Shield, Viton.

**Respiratory Protection:** No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

**Occupational Exposure Limits:**

Component	Agency	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	ACGIH	5 mg/m3	10 mg/m3	--	--
Highly refined mineral oil (C15 - C50)	OSHA Z-1	5 mg/m3	--	--	--

Consult local authorities for appropriate values.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**



**Attention: the data below are typical values and do not constitute a specification.**

**Color:** Amber  
**Physical State:** Liquid  
**Odor:** Petroleum odor  
**Odor Threshold:** No data available  
**pH:** Not Applicable  
**Vapor Pressure:** <0.01 mmHg @ 100 °C (212 °F)  
**Vapor Density (Air = 1):** >1  
**Initial Boiling Point:** 315°C (599°F)  
**Solubility:** Soluble in hydrocarbons; insoluble in water  
**Freezing Point:** Not Applicable @ 15.6°C (60.1°F) / 15.6°C (60.1°F)  
**Density:** 0.8732 kg/l @ 15°C (59°F) Minimum  
**Viscosity:** 9.9 mm<sup>2</sup>/s @ 100°C (212°F) (Min)  
**Decomposition temperature:** No Data Available  
**Octanol/Water Partition Coefficient:** No data available

**FLAMMABLE PROPERTIES:**

**Flammability (solid, gas):** No Data Available  
**Flashpoint:** (Cleveland Open Cup) 205 °C (401 °F) (Min)  
**Autoignition:** No data available  
**Flammability (Explosive) Limits (% by volume in air):** Lower: Not Applicable Upper: Not Applicable

**SECTION 10 STABILITY AND REACTIVITY**

**Reactivity:** This material is not expected to react.  
**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.  
**Incompatibility With Other Materials:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.  
**Hazardous Decomposition Products:** None known (None expected)  
**Hazardous Polymerization:** Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION**

**Information on toxicological effects**

**Serious Eye Damage/Irritation:** The eye irritation hazard is based on evaluation of data for product components.

**Skin Corrosion/Irritation:** The skin irritation hazard is based on evaluation of data for product components.

**Skin Sensitization:** The skin sensitization hazard is based on evaluation of data for product components.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for product components.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for product components.

**Acute Toxicity Estimate:** Not Determined

**Germ Cell Mutagenicity:** The hazard evaluation is based on data for components or a similar material.

**Carcinogenicity:** The hazard evaluation is based on data for components or a similar material.

**Reproductive Toxicity:** The hazard evaluation is based on data for components or a similar material.

**Specific Target Organ Toxicity - Single Exposure:** The hazard evaluation is based on data for components or a similar material.

**Specific Target Organ Toxicity - Repeated Exposure:** The hazard evaluation is based on data for components or a similar material.

**ADDITIONAL TOXICOLOGY INFORMATION:**

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as; carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B).

These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

During use in engines, contamination of oil with low levels of cancer-causing combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water.

**SECTION 12 ECOLOGICAL INFORMATION**

**ECOTOXICITY**

This material is not expected to be harmful to aquatic organisms. The ecotoxicity hazard is based on an evaluation of data for the components or a similar material. The product has not been tested. The statement has been derived from the properties of the individual components.

**MOBILITY**

No data available.

**PERSISTENCE AND DEGRADABILITY**

This material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material. The product has not been tested. The statement has been derived from the properties of the individual components.

**POTENTIAL TO BIOACCUMULATE**

Bioconcentration Factor: No data available.

Octanol/Water Partition Coefficient: No data available

**SECTION 13 DISPOSAL CONSIDERATIONS**

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

**SECTION 14 TRANSPORT INFORMATION**

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Description:** PETROLEUM LUBRICATING OIL, NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

**IMO/IMDG Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

**ICAO/IATA Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO TI OR IATA DGR

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code:**  
Not applicable

**SECTION 15 REGULATORY INFORMATION**

<b>EPCRA 311/312 CATEGORIES:</b>	1. Immediate (Acute) Health Effects:	NO
	2. Delayed (Chronic) Health Effects:	NO
	3. Fire Hazard:	NO
	4. Sudden Release of Pressure Hazard:	NO
	5. Reactivity Hazard:	NO

**REGULATORY LISTS SEARCHED:**

- |                     |                      |
|---------------------|----------------------|
| 01-1=IARC Group 1   | 03=EPCRA 313         |
| 01-2A=IARC Group 2A | 04=CA Proposition 65 |
| 01-2B=IARC Group 2B | 05=MA RTK            |
| 02=NTP Carcinogen   | 06=NJ RTK            |
|                     | 07=PA RTK            |

No components of this material were found on the regulatory lists above.

**CHEMICAL INVENTORIES:**

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), KECl (Korea), PICCS (Philippines), TSCA (United States).

One or more components is listed on ELINCS (European Union). Secondary notification by the importer may be required. All other components are listed or exempted from listing on EINECS.

One or more components does not comply with the following chemical inventory requirements: ENCS (Japan).

**NEW JERSEY RTK CLASSIFICATION:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Motor oil)

**SECTION 16 OTHER INFORMATION**

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0

**HMIS RATINGS:** Health: 0 Flammability: 1 Reactivity: 0  
(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**LABEL RECOMMENDATION:**  
Label Category : ENGINE OIL 1 - ENG1

**REVISION STATEMENT:** This revision updates the following sections of this Safety Data Sheet: 16  
**Revision Date:** JULY 07, 2014

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
GHS - Globally Harmonized System	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Governmental Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	SDS - Safety Data Sheet
HMIS - Hazardous Materials Information System	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration
NCEL - New Chemical Exposure Limit	EPA - Environmental Protection Agency
SCBA - Self-Contained Breathing Apparatus	

Prepared according to the 29 CFR 1910.1200 (2012) by Chevron Energy Technology Company, 6001 Bollinger Canyon Road San Ramon, CA 94583.

**The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.**

# SAFETY DATA SHEET

Clarion® Green A/W Oil 46



## Section 1. Identification

<b>GHS product identifier</b>	: Clarion® Green A/W Oil 46
<b>Synonyms</b>	: Hydraulic oil; CITGO® Material Code: 633552009
<b>Code</b>	: 633552009
<b>MSDS #</b>	: 633551009
<b>Supplier's details</b>	: CITGO Petroleum Corporation P.O. Box 4689 Houston, TX 77210 sdsvend@citgo.com
<b>Emergency telephone number</b>	: Technical Contact: (800) 248-4684 Medical Emergency: (832) 486-4700 CHEMTREC Emergency: (800) 424-9300 (United States Only)

## Section 2. Hazards identification

<b>OSHA/HCS status</b>	: While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
<b>Classification of the substance or mixture</b>	: Not classified.
<b>GHS label elements</b>	
<b>Signal word</b>	: Warning
<b>Hazard statements</b>	: Injection under the skin can cause severe injury. Most damage occurs in the first few hours. Initial symptoms may be minimal.
<b>Precautionary statements</b>	
<b>General</b>	: Avoid contact with eyes, skin and clothing. May be harmful if swallowed. IF IN EYES: Rinse cautiously with water for several minutes. Do NOT induce vomiting. After handling, always wash hands thoroughly with soap and water. If you feel unwell, seek medical attention and show the label when possible. Keep out of reach of children.
<b>Prevention</b>	: Not applicable.
<b>Response</b>	: Not applicable.
<b>Storage</b>	: Store in a dry place and/or in closed container. Store in accordance with all local, regional, national and international regulations.
<b>Disposal</b>	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazards not otherwise classified</b>	: Injection of petroleum hydrocarbons requires immediate medical attention

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture
<b>Other means of identification</b>	: Hydraulic oil; CITGO® Material Code: 633552009
<b>CAS number/other identifiers</b>	
<b>CAS number</b>	: Not applicable.

## Section 3. Composition/information on ingredients

Any concentration shown as a range is to protect confidentiality or is due to process variation.

**There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Injection of pressurized hydrocarbons can cause severe permanent tissue damage. Initial symptoms may be minor.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : Treat symptomatically and supportively.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

## Section 5. Fire-fighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
phosphorus oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**Bulk Storage Conditions:** Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

None identified.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

- Physical state** : Liquid.
- Color** : Light green.
- Odor** : Faint odor.
- pH** : Not available.
- Boiling point** : Not available.
- Flash point** : Open cup: 204°C (399.2°F) [Cleveland.]
- Evaporation rate** : <1 (butyl acetate = 1)
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : <0.013 kPa (<0.1 mm Hg) [room temperature]
- Vapor density** : >1 [Air = 1]
- Relative density** : 0.86
- Density lbs/gal** : 7.21 lbs/gal
- Gravity, °API** : 32
- Solubility** : Insoluble in the following materials: cold water.



## Section 9. Physical and chemical properties

- Viscosity** : Kinematic (40°C (104°F)): 0.46 cm<sup>2</sup>/s (46 cSt)  
**Viscosity SUS** : 238 SUS @100 F

## Section 10. Stability and reactivity

- Reactivity** : Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide under US GHS Definition(s).
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

- Conclusion/Summary** : **White mineral oil (petroleum)**: Low-viscosity and High-viscosity White Mineral Oils: 25,45,50,70]  
 DRAIZE EYE, Acute: Non-irritating [Rabbit].  
 DRAIZE DERMAL, Acute: Non-irritating [Rabbit].  
 BUEHLER, Acute: Non-sensitizing [Guinea Pig].  
 28-Day DERMAL, Sub-Chronic: Non-irritating [Rabbit].  
 104-Week DERMAL, Chronic: No skin tumors at site of application [Mouse].  
 MUTAGENICITY:  
 Modified Ames Assay: Negative [Salmonella typhimurium].  
 in-vitro Lymphoma Assay: Negative or no toxicity [Mouse].

Lifetime mouse skin painting studies indicated that white mineral oils are not mutagenic or carcinogenic. Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipid granuloma formation and lipid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

#### Irritation/Corrosion

- Skin** : No additional information.  
**Eyes** : No additional information.  
**Respiratory** : No additional information.

#### Sensitization

- Skin** : No additional information.  
**Respiratory** : No additional information.

#### Mutagenicity

- Conclusion/Summary** : No additional information.

#### Carcinogenicity

- Conclusion/Summary** : No additional information.

## Section 11. Toxicological information

### Reproductive toxicity

**Conclusion/Summary** : No additional information.

### Teratogenicity

**Conclusion/Summary** : No additional information.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Routes of entry anticipated: Dermal.

### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Injection of pressurized hydrocarbons can cause severe permanent tissue damage. Initial symptoms may be minor.

**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

**Inhalation** : No specific data.

**Skin contact** : No specific data.

**Ingestion** : No specific data.

### Potential chronic health effects

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

## Section 12. Ecological information

### Toxicity

**Conclusion/Summary** : Not available.

### Persistence and degradability

**Conclusion/Summary** : Not available.

### Bioaccumulative potential

Not available.

### Mobility in soil

## Section 12. Ecological information

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	IMDG	IATA
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-
<b>Transport hazard class(es)</b>	-	-	-
<b>Packing group</b>	-	-	-
<b>Environmental hazards</b>	No.	No.	No.
<b>Additional information</b>	-	-	-

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 307:** naphthalene  
**Clean Water Act (CWA) 311:** naphthalene  
 This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

## Section 15. Regulatory information

### SARA 302/304

#### Composition/information on ingredients

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Not applicable.

#### Composition/information on ingredients

### State regulations

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : None of the components are listed.

**Pennsylvania** : None of the components are listed.

### California Prop. 65

**WARNING:** This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
naphthalene	trace	Yes.	No.	Yes.	No.

### International regulations

#### International lists

- Australia inventory (AICS):** All components are listed or exempted.
  - China inventory (IECSC):** Not determined.
  - Japan inventory:** Not determined.
  - Korea inventory:** All components are listed or exempted.
  - Malaysia Inventory (EHS Register):** Not determined.
  - New Zealand Inventory of Chemicals (NZIoC):** All components are listed or exempted.
  - Philippines inventory (PICCS):** All components are listed or exempted.
  - Taiwan inventory (CSNN):** Not determined.
- Canada inventory** : All components are listed or exempted.
- EU Inventory** : All components are listed or exempted.
- WHMIS (Canada)** : Not controlled under WHMIS (Canada).

## Section 16. Other information

### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

**Date of issue/Date of revision** : 12/8/2014.

## Section 16. Other information

### Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

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- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

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**SAFETY DATA SHEET**

**1. Product And Company Identification**

SDS ID: SDS 501  
 PRODUCT NAME: Prestone® Antifreeze/Coolant  
 PRODUCT NUMBER: AF2000X, AF2000L, AF2050, AF2055, 72025, 71605, 71621, PRES04C, AF2000UK, AF2000PL, AF2000-1KL, AF2000LRU, AF2000RU, 65069, AF2000/GF, AF2000/GFC, AF2055/GF, AF2000-1KL/GF, AF2000/GXF, AF2000/GXF-HT, 71621/GF, 71621/GFC, 71621/GFC3  
 FORMULA NUMBER: YA956BY, YA956BY-B, YA956BY-ED, YA956BY-ED-B, YA-956BY-GLY, YA-992

MANUFACTURER: Prestone Products Corporation Danbury, CT 06810-5109	CANADIAN OFFICE: FRAM Group (Canada), Inc. Mississauga, Ontario L5L 3S6
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**MEDICAL EMERGENCIES AND ALL OTHER INFORMATION PHONE NUMBER:**

(800)890-2075 (in the US)  
 (800)668-9349 (in Canada)

**TRANSPORTATION EMERGENCY PHONE NUMBER (Chemical Spills and Transport Accidents only):**

CHEMTREC 1-800-424-9300 (in the US)  
 CANUTEC (613)996-6666 (in Canada)

SDS DATE OF PREPARATION/REVISION: 04/16/14

PRODUCT USE: Automobile Antifreeze – consumer product  
 RESTRICTIONS ON USE: None identified

**2. Hazards Identification**

**GHS/HAZCOM 2012 Classification:**

Health	Physical
Acute Toxicity Category 4 Specific Target Organ Toxicity – repeated exposure Category 2 Reproductive Toxicity Category 2	Not Hazardous

**Label Elements**



**WARNING!**

H302 Harmful if swallowed.  
 H361d Suspected of damaging the unborn child.  
 H373 May cause damage to kidneys through prolonged or repeated exposure.

**Prevention:**

P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P260 Do not breathe mist or vapors.  
 P264 Wash exposed skin thoroughly after handling.



P270 Do not eat, drink, or smoke when using this product.  
P281 Use personal protective equipment as required.  
**Response:**  
P301 + P312 IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell.  
P330 Rinse mouth.  
P308 + P313 IF exposed or concerned: Get medical advice.  
**Disposal:**  
P405 Store locked up.  
P501 Dispose of contents and container in accordance with local and national regulations.

### 3. Composition/Information On Ingredients

Component	CAS No.	Amount
Ethylene Glycol	107-21-1	75-95%
2-Ethyl Hexanoic Acid, Sodium Salt	19766-89-3	1-5%
Neodecanoic Acid, Sodium Salt	31548-27-3	1-5%
Diethylene Glycol	111-46-6	0-5%

The exact concentrations are a trade secret.

### 4. First Aid Measures

**INHALATION:** Remove the victim to fresh air. If breathing has stopped administer artificial respiration. If breathing is difficult, have medical personnel administer oxygen. Get medical attention.

**SKIN CONTACT:** Remove contaminated clothing. Immediately wash contacted area thoroughly with soap and water. If irritation persists, get medical attention.

**EYE CONTACT:** Immediately flush eyes with large amounts of water for 15 minutes. Get medical attention if irritation persists.

**INGESTION:** Seek immediate medical attention. Immediately call local poison control center or go to an emergency department. Never give anything by mouth to or induce vomiting in an unconscious or drowsy person.

**MOST IMPORTANT SYMPTOMS:** May cause eye irritation. Inhalation of mists may cause nose and throat irritation and nervous system effects. Ingestion may cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects.

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED:** Seek immediate medical attention for large ingestions.

**NOTES TO PHYSICIAN:** The principal toxic effects of ethylene glycol, when swallowed, are kidney damage and metabolic acidosis. The combination of metabolic acidosis, an osmol gap and oxalate crystals in the urine is evidence of ethylene glycol poisoning. Pulmonary edema with hypoxemia has been described in a number of patients following poisoning with ethylene glycol. Respiratory support with mechanical ventilation may be required. There may be cranial nerve involvement in the late stages of toxicity from swallowed ethylene glycol. In particular, effects have been reported involving the seventh, eighth, and ninth cranial nerves, presenting with bilateral facial paralysis, diminished hearing and dysphagia.

Ethanol is antidotal and its early administration may block the formation of nephrotoxic metabolites of ethylene glycol in the liver. The objective is to rapidly achieve and maintain a blood ethanol level of approximately 100 mg/dl by giving a loading dose of ethanol followed by a maintenance dose. Intravenous administration of ethanol is the preferred route. Ethanol blood levels should be checked frequently. Hemodialysis may be required. 4-Methyl pyrazole (Fomepizole®), a potent inhibitor of



alcohol dehydrogenase, has been used therapeutically to decrease the metabolic consequences of ethylene glycol poisoning. Fomepizole® is easier to use clinically than ethanol, does not cause CNS depression or hypoglycemia and requires less monitoring than ethanol. Additional therapeutic modalities which may decrease the adverse consequences of ethylene glycol metabolism are the administration of both thiamine and pyridoxine. As there are complicated and serious overdoses, we recommend you consult with the toxicologists at your poison control center.

#### 5. Firefighting Measures

**SUITABLE EXTINGUISHING MEDIA:** For large fires, use alcohol type or all-purpose foams. For small fires, use water spray, carbon dioxide or dry chemical.

**SPECIFIC HAZARDS ARISING FROM THE CHEMICAL:** A solid stream of water or foam directed into hot, burning liquid can cause frothing. Burning may produce carbon monoxide and carbon dioxide.

**SPECIAL FIRE FIGHTING PROCEDURES:** Do not spray pool fires directly. Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

#### 6: Accidental Release Measures

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Wear appropriate protective clothing and equipment (See Section 8).

**METHODS AND MATERIALS FOR CONTAINMENT/CLEANUP:** Collect with absorbent material and place in appropriate, labeled container for disposal or, if permitted flush spill area with water.

#### 7. Handling and Storage

**PRECAUTIONS FOR SAFE HANDLING:**

Harmful or Fatal if Swallowed. Do not drink antifreeze or solution. Avoid eye and prolonged or repeated skin contact. Avoid breathing vapors or mists. Wash exposed skin thoroughly with soap and water after use. Do not store in opened or unlabeled containers. Keep container away from open flames and excessive heat. Do not reuse empty containers unless properly cleaned. Empty containers retain product residue and may be dangerous. Do not cut, weld, drill, etc. containers, even empty.

Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without any obvious ignition sources. Published "autoignition" or "ignition" temperatures cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Use of this product in elevated temperature applications should be thoroughly evaluated to assure safe operating conditions.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:** Store away from excessive heat and oxidizers.

**NFPA CLASSIFICATION:** III B

#### 8. Exposure Controls / Personal Protection

**EXPOSURE GUIDELINES**



CHEMICAL	EXPOSURE LIMIT
Ethylene Glycol (as aerosol)	100 mg/m <sup>3</sup> Ceiling ACGIH TLV
2-Ethyl Hexanoic Acid, Sodium Salt	None Established
Neodecanoic Acid, Sodium Salt	None Established
Diethylene Glycol	10 mg/m <sup>3</sup> TWA AIHA WEEL

VENTILATION: Use general ventilation or local exhaust as required to maintain exposures below the occupational exposure limits.

RESPIRATORY PROTECTION: For operations where the TLV is exceeded a NIOSH approved respirator with organic vapor cartridges and dust/mist prefilters or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select and use in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

GLOVES: Chemical resistant gloves such as neoprene or PVC where contact is possible.

EYE PROTECTION: Splash-proof goggles.

OTHER PROTECTIVE EQUIPMENT/CLOTHING: Appropriate protective clothing as needed to minimize skin contact.

### 9. Physical and Chemical Properties

APPEARANCE:	Yellow liquid	ODOR:	Characteristic odor
ODOR THRESHOLD:	None	pH:	8.7-9.2
MELTING/FREEZING POINT:	-34°F (-36.6°C) – -36°F (-37.7°C)	BOILING POINT/RANGE:	327°F (164°C) – 340°F (171.1°C)
FLASH POINT:	254 °F (123 °C) TOC >230 °F (>110 °C) Setaflash	EVAPORATION RATE:	Not determined
FLAMMABILITY (SOLID, GAS)	Not Applicable	FLAMMABILITY LIMITS:	LEL: Not determined UEL: Not determined
VAPOR PRESSURE:	<0.06 mm Hg @20°C	VAPOR DENSITY:	2.1
RELATIVE DENSITY:	1.07-1.14	SOLUBILITIES	Water: Complete
PARTITION COEFFICIENT (n-octanol/water)	Not determined	AUTOIGNITION TEMPERATURE:	Not determined
DECOMPOSITION TEMPERATURE:	Not determined	VISCOSITY:	Not determined

### 10. Stability and Reactivity

REACTIVITY: Normally unreactive

CHEMICAL STABILITY: Stable

POSSIBILITY OF HAZARDOUS REACTIONS: Reaction with strong oxidizers will generate heat.

CONDITIONS TO AVOID: None known

INCOMPATIBLE MATERIALS: Avoid strong bases at high temperatures, strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide.





## 11. Toxicological Information

### POTENTIAL HEALTH EFFECTS:

#### ACUTE HAZARDS:

**INHALATION:** May cause irritation of the nose and throat with headache, particularly from mists. High vapor concentrations caused, for example, by heating the material in an enclosed and poorly ventilated workplace, may produce nausea, vomiting, headache, dizziness and irregular eye movements.

**SKIN CONTACT:** No evidence of adverse effects from available information.

**EYE CONTACT:** Liquid, vapors or mist may cause discomfort in the eye with persistent conjunctivitis, seen as slight excess redness or conjunctiva. Serious corneal injury is not anticipated.

**INGESTION:** May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, back pain, decrease in urine output, kidney failure, and central nervous system effects, including irregular eye movements, convulsions and coma. Cardiac failure and pulmonary edema may develop. Severe kidney damage which may be fatal may follow the swallowing of ethylene glycol. A few reports have been published describing the development of weakness of the facial muscles, diminishing hearing, and difficulty with swallowing, during the late stages of severe poisoning.

**CHRONIC EFFECTS:** Prolonged or repeated inhalation exposure may produce signs of central nervous system involvement, particularly dizziness and jerking eye movements. Prolonged or repeated skin contact may cause skin sensitization and an associated dermatitis in some individuals. Ethylene glycol has been found to cause birth defects in laboratory animals. The significance of this finding to humans has not been determined. 2-Ethyl Hexanoic Acid, Sodium Salt is suspected of causing developmental effects based on animal data.

**CARCINOGENICITY LISTING:** None of the components of these products is listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH or OSHA.

#### ACUTE TOXICITY VALUES:

Ethylene Glycol: LD50 Oral Rat: 4700 mg/kg  
LD50 Skin Rabbit: 9530 mg/kg

Diethylene Glycol: LD50 Oral Rat: 12,565 mg/kg  
LD50 Skin Rabbit: 11,890 mg/kg

**SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH:** Ethylene glycol has been shown to produce dose-related teratogenic effects in rats and mice when given by gavage or in drinking water at high concentrations or doses. Also, in a preliminary study to assess the effects of exposure of pregnant rats and mice to aerosols at concentrations 150, 1,000 and 2,500 mg/m<sup>3</sup> for 6 hours a day throughout the period of organogenesis, teratogenic effects were produced at the highest concentrations, but only in mice. The conditions of these latter experiments did not allow a conclusion as to whether the developmental toxicity was mediated by inhalation of aerosol, percutaneous absorption of ethylene glycol from contaminated skin, or swallowing of ethylene glycol as a result of grooming the wetted coat. In a further study, comparing effects from high aerosol concentration by whole-body or nose-only exposure, it was shown that nose-only exposure resulted in maternal toxicity (1,000 and 2,500 mg/m<sup>3</sup>) and developmental toxicity in with minimal evidence of teratogenicity (2,500 mg/m<sup>3</sup>). The no-effects concentration (based on maternal toxicity) was 500 mg/m<sup>3</sup>. In a further study in mice, no teratogenic effects could be produced when ethylene glycol was applied to the skin of pregnant mice over the period of organogenesis. The above observations suggest that ethylene glycol is to be regarded as an animal teratogen; there is currently no available information to suggest that ethylene glycol caused birth defects in humans. Cutaneous application of ethylene glycol is ineffective in producing developmental toxicity; exposure to high aerosol concentration is only minimally



effective in producing developmental toxicity; the major route for producing developmental toxicity is perorally.

Two chronic feeding studies, using rats and mice, have not produced any evidence that ethylene glycol causes dose-related increases in tumor incidence or a different pattern of tumors compared with untreated controls. The absence of carcinogenic potential for ethylene glycol has been supported by numerous invitro genotoxicity studies showing that it does not produce mutagenic or clastogenic effects. This product contains less than 0.3% tolytriazole which has demonstrates mutagenic activity in a bacterial test system. A correlation has been established between mutagenic activity and carcinogenic activity for many chemicals. Tolytriazole has not been identified as a carcinogen or probable carcinogen by NTP, IARC or OSHA.

In a study of Wistar rats, adverse developmental results were reported at a dose of 100 mg / kg of body weight for 2-Ethyl Hexanoic Acid, Sodium Salt.

**12. Ecological Information**

**ECOTOXICITY:**

- Ethylene Glycol: LC50 Fathead Minnow <10,000 mg/L/96 hr.
- EC50 Daphnia Magna 100,000 mg/L/48 hr.
- Bacterial (Pseudomonas putida): 10,000 mg/l
- Protozoa (Entosiphon sulcatum and Uronema parduczii; Chatton-Lwoff): >10,000 mg/l
- Algae (Microcystis aeruginosa): 2,000 mg/l
- Green algae (Scenedesmus quadricauda): >10,000 mg/l
- Diethylene Glycol: LC50 western mosquitofish >32,000 mg/L/96 hr.

**PERSISTENCE AND DEGRADABILITY:**

Ethylene Glycol is readily biodegradable (97-100% in 2-12 days). Diethylene glycol is readily biodegradable (>70% in 19days).

**BIOACCUMULATIVE POTENTIAL:**

- Ethylene glycol: A BCF of 10, reported for ethylene glycol in fish, Golden ide (Leuciscus idus melanotus), after 3 days of exposure suggests the potential for bio concentration in aquatic organisms is low.
- Diethylene glycol: An estimated BCF of 3 suggests the potential for bio concentration in aquatic organisms is low.

**MOBILITY IN SOIL:** Ethylene glycol and diethylene glycol are highly mobile in soil.

**OTHER ADVERSE EFFECTS:** None known

**13. Disposal Considerations**

Dispose of product in accordance with all local, state/provincial and federal regulations.

**14. Transport Information**

**U.S. DOT HAZARD CLASSIFICATION:** Not Regulated (unless package contains a reportable quantity)

**Note:** IF A SHIPMENT OF A REPORTABLE QUANTITY (5,260 LBS/553 GAL.) IN A SINGLE PACKAGE IS INVOLVED, THE FOLLOWING INFORMATION APPLIES:

- PROPER SHIPPING NAME:** RQ, Environmentally hazardous substance, liquid, n.o.s. (Ethylene glycol)
- UN NUMBER:** UN3082
- PACKING GROUP:** III
- LABELS REQUIRED:** Class 9

**DOT MARINE POLLUTANTS:** This product does not contain Marine Pollutants as defined in 49 CFR 171.8.



IMDG CODE SHIPPING CLASSIFICATION: Not Regulated

CANADIAN TDG CLASSIFICATION: Not Regulated

### 15. Regulatory Information

EPA SARA 311/312 HAZARD CLASSIFICATION: Acute health, chronic health

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Ethylene Glycol 107-21-1 75-95%

PROTECTION OF STRATOSPHERIC OZONE: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for this product, based on the RQ for Ethylene Glycol (95% maximum) of 5,000 lbs, is 5,260 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

CALIFORNIA PROPOSITION 65: The normal consumer use of this product does not result in exposures to chemicals known to the State of California to cause Cancer and/or Reproductive Harm above the significant risk level for carcinogens or the maximum allowable dose levels for reproductive toxins. Therefore, no warnings are required for consumer packages. Industrial or other occupational use of this product at higher frequency and using larger quantities of this product may result in exposures exceeding these levels and are labeled accordingly.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CANADIAN ENVIRONMENTAL PROTECTION ACT: All of the ingredients are listed on the Canadian Domestic Substances List.

CANADIAN WHMIS CLASSIFICATION: Class D - Division 2 - Subdivision A - (A very toxic material causing other toxic effects)



CANADIAN WHMIS HAZARD SYMBOLS:

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): All of the ingredients are listed on the EINECS inventory.

JAPAN: All of the ingredients of this product are listed on the Japanese Existing and New Chemical Substances (MITI) List.

AUSTRALIA: All of the ingredients of this product are listed on the Australian Inventory of Chemical Substances.

KOREA: All of the ingredients of this product are listed on the Korean Existing Chemical List (KECL).

PHILIPPINES: All of the ingredients of this product are listed on the Philippine Inventory of Chemical and Chemical Substance (PICCS)

CHINA: All of the ingredients of this product are listed on the Inventory of Existing Chemical Substance in China (IECSC).



**16. Other Information**

NFPA RATING (NFPA 704) - FIRE: 1      HEALTH: 2      INSTABILITY: 0

REVISION SUMMARY: All Sections – Section 1: Addition of formula and product numbers. Section 9: Changes to physical data ranges.

SDS Date of Preparation/Revision: April 16, 2016

This SDS is directed to professional users and bulk handlers of the product. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations.

While Prestone Products Corporation believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of the tests conducted, the data are not to be taken as a warranty or representation for which Prestone Products Corporation assumes legal responsibility. They are offered solely for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

If more information is needed, please contact:      Prestone Products Corporation  
69 Eagle Road  
Danbury CT 06810  
(800) 890-2075



# SAFETY DATA SHEET

## Section 1. Identification

CHS Inc.	Transportation Emergency (CHEMTREC)	:	1-800-424-9300
P.O. Box 64089	Technical Information	:	1-651-355-8443
Mail station 525	SDS Information	:	1-651-355-8445
St. Paul, MN 55164-0089			

<b>Product name</b>	: CONCRETE FORM OIL	<b>SDS no.</b>	: 0132-043799
<b>Common name</b>	: Form release oil.	<b>Revision date</b>	: 05/07/2015
<b>Chemical name</b>	: Lubricating oil.	<b>Chemical formula</b>	: Mixture
<b>Chemical family</b>	: Hydrocarbon.		

### Relevant identified uses of the substance or mixture and uses advised against

Not available.

## Section 2. Hazards identification

**OSHA/HCS status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture** : Not classified.

### GHS label elements

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

### Precautionary statements

**General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Hazards not otherwise classified (HNOC)** : None known.

**Hazardous Material Information System (U.S.A.)**    **Health** : 1 \* **Flammability** : 1    **Physical hazards** : 0

**National Fire Protection Association (U.S.A.)**    **Health** : 1    **Flammability** : 1    **Instability** : 0

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Chemical name** : Lubricating oil.

**Other means of identification** : Form release oil.

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated light	60 - 100	64742-47-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : If material comes in contact with the eyes, immediately wash the eyes with large amounts of water for 15 minutes, occasionally lifting the lower and upper lids. Get medical attention.
- Inhalation** : If person breathes in large amounts of material, move the exposed person to fresh air at once. If breathing has stopped, perform artificial respiration. Keep the person warm and at rest. Get medical attention as soon as possible.
- Skin contact** : If the material comes in contact with the skin, wash the contaminated skin with soap and water promptly. If the material penetrates through clothing, remove the clothing and wash the skin with soap and water promptly. If irritation persists after washing, get medical attention immediately.
- Ingestion** : If material has been swallowed, do not induce vomiting. Get medical attention immediately.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following: pain or irritation, watering, redness.
- Inhalation** : Adverse symptoms may include the following: respiratory tract irritation, coughing.
- Skin contact** : Adverse symptoms may include the following: irritation, redness.
- Ingestion** : No known significant effects or critical hazards.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use water spray to cool fire exposed surfaces and to protect personnel. Foam, dry chemical or water spray (fog) to extinguish fire.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : Toxic fumes gases or vapors may evolve on burning.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- Special protective actions for fire-fighters** : When fighting fires wear full turnout gear and self contained breathing apparatus. Water may cause splattering. Material floats on water.
- Special protective equipment for fire-fighters** : Not applicable.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Keep unnecessary and unprotected personnel from entering. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

### Methods and materials for containment and cleaning up

- Spill** : Contain with dikes or absorbent to prevent migration to sewers/streams. Take up small spill with dry chemical absorbent; large spills may require pump or vacuum prior to absorbent. May require excavation of severely contaminated soil.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking.
- Conditions for safe storage, including any incompatibilities** : Handling temperatures should not exceed 175°F (80°C). Odorous and toxic fumes may form from the decomposition of this product if stored at excessive temperatures for extended periods of time. Store in accordance with local regulations. Do not store at temperatures exceeding 113°F (45°C). Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10).

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated light	<b>OSHA PEL (United States).</b> TWA: 213 ppm TWA: 1200 mg/m <sup>3</sup> <b>ACGIH TLV (United States, 6/2013). Absorbed through skin.</b> TWA: 200 mg/m <sup>3</sup> , (as total hydrocarbon vapor) 8 hours.

- Appropriate engineering controls** : Use only with adequate ventilation.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Recommended: Splash goggles and a face shield, where splash hazard exists.
- Skin protection**
- Hand protection** : 4 - 8 hours (breakthrough time): Nitrile gloves.
- Body protection** : Recommended: Long sleeved coveralls.
- Other skin protection** : Recommended: Impervious boots.
- Respiratory protection** : If ventilation is inadequate, use a NIOSH-certified respirator with an organic vapor cartridge and P95 particulate filter.

## Section 9. Physical and chemical properties

<b>Appearance</b>		<b>Relative density</b>	: 0.885 to 0.895
<b>Physical state</b>	: Liquid.	<b>Evaporation rate</b>	: <1 (Ether. = 1)
<b>Color</b>	: Amber.	<b>Solubility</b>	: Insoluble in the following materials: cold water and hot water.
<b>Odor</b>	: Mild.	<b>Solubility in water</b>	: Insoluble
<b>Odor threshold</b>	: Not available.	<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>pH</b>	: Not available.	<b>Auto-ignition temperature</b>	: >260°C (>500°F)
<b>Melting point</b>	: Not available.	<b>Decomposition temperature</b>	: Not available.
<b>Boiling point</b>	: Not available.	<b>SADT</b>	: Not available.
<b>Flash point</b>	: Closed cup: >144°C (>291.2°F)	<b>Viscosity</b>	: Not available.
<b>Flammability</b>	: Not available.	<b>Vapor pressure</b>	: <0.13 kPa (<1 mm Hg) (68°F)
<b>Lower and upper explosive (flammable) limits</b>	: Not available.	<b>Vapor density</b>	: Not available.

**Section 10. Stability and reactivity**

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.  
**Chemical stability** : The product is stable.  
**Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : No specific data.  
**Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.  
**Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Section 11. Toxicological information**

**Information on toxicological effects**

**Acute toxicity**

There is no data available.

**Irritation/Corrosion**

- Skin** : There is no data available.  
**Eyes** : There is no data available.  
**Respiratory** : There is no data available.

**Sensitization**

- Skin** : There is no data available.  
**Respiratory** : There is no data available.

**Mutagenicity**

There is no data available.

**Carcinogenicity**

There is no data available.

**Reproductive toxicity**

There is no data available.

**Teratogenicity**

There is no data available.

**Specific target organ toxicity (single exposure)**

There is no data available.

**Specific target organ toxicity (repeated exposure)**

There is no data available.

**Aspiration hazard**

Name	Result
Distillates (petroleum), hydrotreated light	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

**Section 12. Ecological information**

**Toxicity**

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute LC50 2200 µg/L Fresh water	Fish - Lepomis macrochirus	4 days

**Persistence and degradability**

There is no data available.

**Bioaccumulative potential**

There is no data available.

**Mobility in soil**



Soil/water partition coefficient (K<sub>oc</sub>) : There is no data available.  
 Other adverse effects : No known significant effects or critical hazards.

**Section 13. Disposal considerations**

**Disposal methods** : Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

**Section 14. Transport information**

DOT IDENTIFICATION NUMBER Not applicable. DOT proper shipping name Not applicable.  
 DOT Hazard Class(es) Not applicable. PG Not applicable. DOT EMER. RESPONSE GUIDE NO. Not available.

**Section 15. Regulatory information**

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
 United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 602 Class I Substances : Not listed DEA List I Chemicals (Precursor Chemicals) : Not listed  
 Clean Air Act Section 602 Class II Substances : Not listed DEA List II Chemicals (Essential Chemicals) : Not listed  
 Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

**SARA 302/304**

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

**SARA 311/312**

Hazard classifications : Not applicable.

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), hydrotreated light	60 - 100	Yes.	No.	No.	No.	No.

**SARA 313** : This product (does/not) contain toxic chemicals subject to the reporting requirements of SARA Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

Product name	CAS number	%
Not applicable.		

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**State regulations**

Massachusetts : The following components are listed: Distillates (petroleum), hydrotreated light naphthenic  
 New York : None of the components are listed.  
 New Jersey : The following components are listed: Distillates (petroleum), hydrotreated light naphthenic  
 Pennsylvania : None of the components are listed.  
 California Prop. 65 : No products were found.

**Section 16. Other information****Revision date** : 05/07/2015**Supersedes** : 06/23/2014**Revised Section(s)** : 1, 2, 16.**Prepared by** : KMK Regulatory Services Inc.Notice to reader

THE INFORMATION CONTAINED IN THIS SDS RELATES ONLY TO THE SPECIFIC MATERIAL IDENTIFIED. IT DOES NOT COVER USE OF THAT MATERIAL IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PARTICULAR PROCESS. IN COMPLIANCE WITH 29 C.F.R. 1910.1200(g), CHS HAS PREPARED THIS SDS IN SEGMENTS, WITH THE INTENT THAT THOSE SEGMENTS BE READ TOGETHER AS A WHOLE WITHOUT TEXTUAL OMISSIONS OR ALTERATIONS. CHS BELIEVES THE INFORMATION CONTAINED HEREIN TO BE ACCURATE, BUT MAKES NO REPRESENTATION, GUARANTEE, OR WARRANTY, EXPRESS OR IMPLIED, ABOUT THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THE INFORMATION OR ABOUT THE FITNESS OF CONTENTS HEREIN FOR EITHER GENERAL OR PARTICULAR PURPOSES. PERSONS REVIEWING THIS SDS SHOULD MAKE THEIR OWN DETERMINATION AS TO THE MATERIAL'S SUITABILITY AND COMPLETENESS FOR USE IN THEIR PARTICULAR APPLICATIONS.



*OUR ENERGY COMES THROUGH®*

A BRAND OF The logo for CHS, consisting of the letters "CHS" in a bold, serif font, with a thin black line curving underneath the letters to form a partial underline.



# CITGO Concrete Form Oil

## Material Safety Data Sheet


CITGO Petroleum Corporation  
 P.O. Box 4689  
 Houston, TX 77210

MSDS No. 643205001  
 Revision Date 4/26/2006

**IMPORTANT:** Prepared in accordance with 29 CFR 1910.1200. Read this MSDS before handling or disposing of this product and pass this information on to employees, customers and users of this product.

Hazard Rankings		
	HMIS	NFPA
Health Hazard	1	0
Fire Hazard	1	1
Reactivity	0	0

\* = Chronic Health Hazard

Protective Equipment
Minimum Recommended See Section 8 for Details
  

Emergency Overview	
Physical State	Liquid.
Color	Light amber
Odor	Mild petroleum odor
<p><b>Protect eyes from misting or spraying material.</b>  <b>Protect exposed skin from repeated or prolonged exposure.</b>  <b>Do not store material in open or unmarked containers.</b>  <b>Spills may create a slipping hazard.</b></p>	

### SECTION 1. PRODUCT IDENTIFICATION

Trade Name	CITGO Concrete Form Oil	Technical Contact	(800) 248-4684
Product Number	643205001	Medical Emergency	(832) 486-4700
CAS Number	Mixture.	CHEMTREC Emergency (United States Only)	(800) 424-9300
Product Family	Industrial oil		
Synonyms	Concrete form oil; CITGO® Material Code: 643205001		

### SECTION 2. COMPOSITION

Component Name(s)	CAS Registry No.	Concentration (%)
Distillates, petroleum, hydrotreated light naphthenic	64742-53-6	0 - 95
Distillates, petroleum, hydrotreated heavy naphthenic	64742-52-5	0 - 95
Lard Oil	8016-28-2	<10

### SECTION 3. HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

Major Route(s) of Entry Skin contact.

#### Signs and Symptoms of Acute Exposure

**Inhalation** At elevated temperatures or in enclosed spaces, product mist or vapors may irritate the mucous membranes of the nose, the throat, bronchi, and lungs.

**Eye Contact**

## CITGO Concrete Form Oil

This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists. Symptoms include stinging, watering, redness, and swelling.

### Skin Contact

This material can cause mild skin irritation from prolonged or repeated skin contact. Injection under the skin can cause inflammation and swelling. Injection of pressurized hydrocarbons can cause severe, permanent tissue damage. Initial symptoms may be minor. Injection of petroleum hydrocarbons requires immediate medical attention.

### Ingestion

If swallowed, large volumes of material can cause generalized depression, headache, drowsiness, nausea, vomiting and diarrhea. Smaller doses can cause a laxative effect. If aspirated into the lungs, liquid can cause lung damage.

### Chronic Health Effects Summary

This product contains a petroleum-based mineral oil. Prolonged or repeated skin contact can cause mild irritation and inflammation characterized by drying, cracking, (dermatitis) or oil acne. Repeated or prolonged inhalation of petroleum-based mineral oil mists at concentrations above applicable workplace exposure levels can cause respiratory irritation or other pulmonary effects.

### Conditions Aggravated by Exposure

Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin

### Target Organs

May cause damage to the following organs: skin.

### Carcinogenic Potential

This product is not known to contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC or NTP.

**OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).**

OSHA Health Hazard Classification			OSHA Physical Hazard Classification						
Irritant	<input type="checkbox"/>	Sensitizer	<input type="checkbox"/>	Combustible	<input type="checkbox"/>	Explosive	<input type="checkbox"/>	Pyrophoric	<input type="checkbox"/>
Toxic	<input type="checkbox"/>	Highly Toxic	<input type="checkbox"/>	Flammable	<input type="checkbox"/>	Oxidizer	<input type="checkbox"/>	Water-reactive	<input type="checkbox"/>
Corrosive	<input type="checkbox"/>	Carcinogenic	<input type="checkbox"/>	Compressed Gas	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>	Unstable	<input type="checkbox"/>

## SECTION 4. FIRST AID MEASURES

**Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.**

### Inhalation

Vaporization is not expected at ambient temperatures. This material is not expected to cause inhalation-related disorders under anticipated conditions of use. In case of overexposure, move the person to fresh air.

### Eye Contact

Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness, or pain persists.

### Skin Contact

If burned by hot material, cool skin by quenching with large amounts of cool water. For contact with product at ambient temperatures, remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Thoroughly clean contaminated clothing before reuse. Discard contaminated leather goods. If material is injected under the skin, seek medical attention immediately.

## CITGO Concrete Form Oil

<b>Ingestion</b>	Do not induce vomiting unless directed to by a physician. Do not give anything to drink unless directed to by a physician. Never give anything by mouth to a person who is not fully conscious. If significant amounts are swallowed or irritation or discomfort occurs, seek medical attention immediately.
<b>Notes to Physician</b>	<p>SKIN: In the event of injection in underlying tissue, immediate treatment should include extensive incision, debridement and saline irrigation. Inadequate treatment can result in ischemia and gangrene. Early symptoms may be minimal.</p> <p>INGESTION: The viscosity range of the product(s) represented by this MSDS is greater than 100 SUS at 100°F. There is a low risk of aspiration upon ingestion. Careful gastric lavage or emesis may be considered to evacuate large quantities of material.</p>

## SECTION 5. FIRE FIGHTING MEASURES

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<b>NFPA Flammability Classification</b>	NFPA Class-IIIB combustible material.		
<b>Flash Point</b>	Open cup: 196°C (385°F) (Cleveland.).		
<b>Lower Flammable Limit</b>	No data.	<b>Upper Flammable Limit</b>	No data.
<b>Autoignition Temperature</b>	Not available.		
<b>Hazardous Combustion Products</b>	Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons and oxides of sulfur and/or nitrogen.		
<b>Special Properties</b>	This material can burn but will not readily ignite. This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, heated vapor can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.		
<b>Extinguishing Media</b>	Use dry chemical, foam, Carbon Dioxide or water fog. Water or foam may cause frothing. Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces.		
<b>Protection of Fire Fighters</b>	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.		

## SECTION 6. ACCIDENTAL RELEASE MEASURES

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**Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.**

Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Contain large spills to maximize product recovery or disposal. Prevent entry into waterways or sewers. In urban area, cleanup spill as soon as possible. In natural environments, seek cleanup advice from specialists to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used. Comply with all laws and regulations.

# CITGO Concrete Form Oil

## SECTION 7. HANDLING AND STORAGE

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<b>Handling</b>	Avoid contamination and extreme temperatures to minimize product degradation. Empty containers may contain product residues that can ignite with explosive force. Do not pressurize, cut, weld, braze solder, drill, grind or expose containers to flames, sparks, heat or other potential ignition sources. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.
<b>Storage</b>	Keep container closed. Do not store with strong oxidizing agents. Do not store at elevated temperatures. Avoid storing product in direct sunlight for extended periods of time. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

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<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). An eye wash station and safety shower should be located near the work-station.
<b>Personal Protective Equipment</b>	Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.



<b>Eye Protection</b>	Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Wear goggles if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125°F (51°C). Have suitable eye wash water available.
<b>Hand Protection</b>	Use gloves constructed of chemical resistant materials such as heavy nitrile rubber if frequent or prolonged contact is expected. Use heat-protective gloves when handling product at elevated temperatures.
<b>Body Protection</b>	Use clean protective clothing if splashing or spraying conditions are present. Protective clothing may include long-sleeve outer garment, apron, or lab coat. If significant contact occurs, remove oil-contaminated clothing as soon as possible and promptly shower. Launder contaminated clothing before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.
<b>Respiratory Protection</b>	The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

## CITGO Concrete Form Oil

**General Comments** Use good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners. Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

### Occupational Exposure Guidelines

<b>Substance</b>	<b>Applicable Workplace Exposure Levels</b>
Oil Mist, Mineral	<b>ACGIH TLV (United States).</b> TWA: 5 mg/m <sup>3</sup> 8 hour(s). STEL: 10 mg/m <sup>3</sup> 15 minute(s). <b>OSHA PEL (United States).</b> TWA: 5 mg/m <sup>3</sup> 8 hour(s).

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

<b>Physical State</b>	Liquid.	<b>Color</b>	Light amber	<b>Odor</b>	Mild petroleum odor
<b>Specific Gravity</b>	0.9 (Water = 1)	<b>pH</b>	Not applicable	<b>Vapor Density</b>	>1 (Air = 1)
<b>Boiling Range</b>	Not available.			<b>Melting/Freezing Point</b>	Not available.
<b>Vapor Pressure</b>	<0.01 kPa (<0.1 mm Hg) (at 20°C)			<b>Volatility</b>	AP 120 g/l VOC (w/v)
<b>Solubility in Water</b>	Very slightly soluble in cold water. (<0.1 % w/w)			<b>Viscosity (cSt @ 40°C)</b>	20
<b>Flash Point</b>	Open cup: 196°C (385°F) (Cleveland.).				
<b>Additional Properties</b>	Gravity, °API (ASTM D287) = 27 @ 60° F Density = 7.43 Lbs/gal. Viscosity (ASTM D2161) = 106 SUS @ 100° F				

## SECTION 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable.	<b>Hazardous Polymerization</b>	Not expected to occur.
<b>Conditions to Avoid</b>	Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.		
<b>Materials Incompatibility</b>	Strong oxidizers.		
<b>Hazardous Decomposition Products</b>	No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.		

## SECTION 11. TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

## CITGO Concrete Form Oil

### Toxicity Data

#### **Distillates, petroleum, hydrotreated light naphthenic:**

ORAL (LD50): Acute: >5000 mg/kg [Rat].  
DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

INHALATION (LC50) Acute: 9.6 mg/L (Female Rat).  
INHALATION (LC50) Acute: 10.5 mg/L (Male Rat).  
DRAIZE EYE Acute: Non-irritating (Rabbit).  
DRAIZE DERMAL Acute: Mild skin irritant (Rabbit).  
BUEHLER DERMAL Acute: Non-sensitizing (Guinea Pig).  
28-Day DERMAL Sub-Chronic: Mild to moderate skin irritant (Rabbit & Rat).

A life-time dermal application of severely hydrotreated light naphthenic oils produced skin masses on mice which correlated with the skin irritation response levels of the test animals. Additional studies attribute these masses to a weak promotional activity. These studies indicate that light naphthenic oils are not mutagenic, tumor initiators nor complete chemical carcinogens. These materials have not been determined to be carcinogenic by IARC, NTP or OSHA.

#### **Distillates, petroleum, hydrotreated heavy naphthenic:**

ORAL (LD50): Acute: >5000 mg/kg [Rat].  
DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

## SECTION 12. ECOLOGICAL INFORMATION

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### **Ecotoxicity**

Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.

### **Environmental Fate**

An environmental fate analysis is not available for this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

## SECTION 13. DISPOSAL CONSIDERATIONS

---

**Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.**



## CITGO Concrete Form Oil

Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact your regional US EPA office for guidance concerning case specific disposal issues.

### SECTION 14. TRANSPORT INFORMATION

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The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.

**US DOT Status** Not regulated by the U.S. Department of Transportation as a hazardous material.

**Proper Shipping Name** Not regulated.

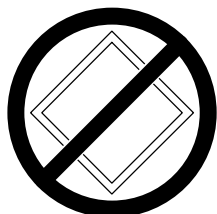
**Hazard Class** Not regulated.

**Packing Group(s)** Not applicable.

**UN/NA Number** Not regulated.

**Reportable Quantity** A Reportable Quantity (RQ) has not been established for this material.

**Placard(s)**



**Emergency Response Guide No.** Not applicable.

**MARPOL III Status** Not a DOT "Marine Pollutant" per 49 CFR 171.8.

### SECTION 15. REGULATORY INFORMATION

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**TSCA Inventory** This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

**SARA 302/304 Emergency Planning and Notification** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

**SARA 311/312 Hazard Identification** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:  
No SARA 311/312 hazard categories identified.

**SARA 313 Toxic Chemical Notification and Release Reporting** This product contains the following components in concentrations above *de minimis* levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: No components were identified.

**CERCLA** The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. This product or refinery stream is not known to contain chemical substances subject to this statute. However, it is recommended that you contact state and local authorities to determine if there are any other reporting requirements

## CITGO Concrete Form Oil

in the event of a spill.

### Clean Water Act (CWA)

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

### California Proposition 65

This product is not known to contain any components for which the State of California has found to cause cancer, birth defects or other reproductive harm.

### New Jersey Right-to-Know Label

Petroleum Oil

### Additional Remarks

No additional regulatory remarks.

## SECTION 16. OTHER INFORMATION

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Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

### REVISION INFORMATION

**Version Number** 2.0  
**Revision Date** 4/26/2006  
**Print Date** Printed on 4/26/2006.

### ABBREVIATIONS

AP: Approximately	EQ: Equal	>: Greater Than	<: Less Than	NA: Not Applicable	ND: No Data	NE: Not Established
ACGIH: American Conference of Governmental Industrial Hygienists				AIHA: American Industrial Hygiene Association		
IARC: International Agency for Research on Cancer				NTP: National Toxicology Program		
NIOSH: National Institute of Occupational Safety and Health				OSHA: Occupational Safety and Health Administration		
NPCA: National Paint and Coating Manufacturers Association				HMIS: Hazardous Materials Information System		
NFPA: National Fire Protection Association				EPA: US Environmental Protection Agency		

### DISCLAIMER OF LIABILITY

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THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.

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\* \* \* \* \* END OF MSDS \* \* \* \* \*



# NAPA Dexcool Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : NAPA Dexcool Concentrate Antifreeze & Coolant

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Antifreeze & Coolant

#### 1.3. Details of the supplier of the safety data sheet

Old World Industries, LLC  
4065 Commercial Ave.  
Northbrook, IL 60062 - USA  
T (847) 559-2000  
[www.oldworldind.com](http://www.oldworldind.com)

#### 1.4. Emergency telephone number

Emergency number : (800) 424-9300; (703) 527 3887 (International)  
Chemtrec

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Acute Tox. 4 (Oral) H302  
Repr. 2 H361  
STOT RE 2 H373

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H302 - Harmful if swallowed  
H361 - Suspected of damaging fertility or the unborn child  
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral)

Precautionary statements (GHS-US) :

P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P260 - Do not breathe mist, spray, vapors  
P264 - Wash affected areas thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P280 - Wear personal protective equipment as required  
P301+P310 - If swallowed: Immediately call doctor/physician or poison center  
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P308+P313 - If exposed or concerned: Get medical advice/attention  
P405 - Store locked up  
P501 - Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	% by wt	GHS-US classification
ethylene glycol	(CAS No) 107-21-1	90 - 97	Acute Tox. 4 (Oral), H302
diethylene glycol	(CAS No) 111-46-6	< 5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
water	(CAS No) 7732-18-5	< 4	Not classified
potassium 2-ethylhexanoate	(CAS No) 3164-85-0	< 3	Repr. 2, H361
denatonium benzoate	(CAS No) 3734-33-6	30 - 50 ppm	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical advice. Allow the victim to rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- First-aid measures after skin contact : Remove contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Rinse immediately with plenty of water (for at least 15 minutes). Get medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water for 15 minutes, lifting lower and upper lids. If eye irritation persists: Rinse immediately with plenty of water. Get medical advice/attention.
- First-aid measures after ingestion : Obtain emergency medical attention. Rinse mouth. If the person is fully conscious, make him/her drink two glasses of water. Never give an unconscious person anything to drink. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell. If medical advice is delayed, and if the person has swallowed a moderate volume of material (a few ounces), then give three to four ounces of hard liquor, such as whiskey. For children, give proportionally less liquor, according to weight.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes damage to organs (kidneys) Oral. Suspected of damaging fertility or the unborn child.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye damage.
- Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100 mL (3 oz).

#### 4.3. Indication of any immediate medical attention and special treatment needed

A more effective intravenous antidote for physician uses is 4-methylpyrazaole, a potent inhibitor of alcohol dehydrogenases, which effectively blocks the formation of toxic metabolites of ethylene glycol. It has been used to decrease the metabolic consequences of ethylene glycol poisoning before metabolic acidosis coma, seizures, and renal failure have occurred.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Fine water spray. Dry powder. Alcohol-resistant foam. Foam. Carbon dioxide. Sand. Water fog.
- Unsuitable extinguishing media : Do not use a heavy water stream. May spread fire.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.
- Reactivity : No dangerous reactions known under normal conditions of use.

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

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Special protective equipment for fire fighters : Wear positive pressure self-contained breathing apparatus (SCBA). Protective fire fighting clothing (includes fire-fighting helmet, coat, pants, boots and gloves).

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Refer to section 8.2.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use. Product may become solid at temperatures below -18 °C (0 °F). Do not cut, drill, weld, use a blowtorch on, etc. containers even when empty. Do not store near food, foodstuffs, drugs or potable water supplies.

Incompatible products : Keep away from strong acids, strong bases and oxidizing agents.

Incompatible materials : Sources of ignition.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### ethylene glycol (107-21-1)

USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	100.00 mg/m <sup>3</sup>
USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract (URT) & Eye irritant

#### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure. Gloves. Safety glasses.



Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : If exposed to levels above exposure limits wear appropriate respiratory protection.

Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

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Color	: orange
Odor	: Mild
Odor threshold	: No data available
pH 50% water solution	: 8
Relative evaporation rate (butylacetate=1)	: Nil
Freezing point	: -18 °C (0 °F)
Boiling point	: 158 °C (317 °F)
Flash point	: 116 °C (241 °F) [100% Ethylene Glycol] <i>ASTM D56</i>
Auto-ignition temperature	: 400 °C (752 °F) [100% Ethylene Glycol] <i>Literature</i>
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: < 0.1 @ 20 °C
Relative vapor density at 20 °C	: No data available
Specific Gravity	: 1.12
Density	: 1.12 g/l (9.3 lbs/gal)
Solubility	: Water: Complete
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.
Explosive limits	: 3.2 - 15.3 vol %

### 9.2. Other information

VOC content : 0.00 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Extremely high or low temperatures. Keep away from any flames or sparking source.

### 10.5. Incompatible materials

Keep away from strong acids, strong bases and oxidizing agents.

### 10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Fume. alcohols. Aldehydes. Ethers.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

<b>denatonium benzoate (3734-33-6)</b>	
LD50 oral rat	584 mg/kg (Rat)
LD50 dermal rabbit	> 2,000 mg/kg (Rabbit)
ATE US (oral)	584 mg/kg bodyweight
<b>ethylene glycol (107-21-1)</b>	
LD50 oral rat	> 5,000 mg/kg (Rat)
ATE US (oral)	500 mg/kg bodyweight

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<b>diethylene glycol (111-46-6)</b>	
LD50 oral rat	12,565 mg/kg (Rat)
LD50 dermal rabbit	11,890 mg/kg (Rabbit)
ATE US (oral)	500 mg/kg bodyweight
ATE US (dermal)	11,890 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100 mL (3 oz).

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>denatonium benzoate (3734-33-6)</b>	
LC50 fish 1	> 1,000 mg/l 96 h; <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> )
EC50 Daphnia 1	13 mg/l (48 h; <i>Daphnia magna</i> )
<b>ethylene glycol (107-21-1)</b>	
LC50 fish 1	53,000 mg/l (96 h; <i>Pimephales promelas</i> ; Static system)
EC50 Daphnia 1	> 10,000 mg/l (24 h; <i>Daphnia magna</i> )
LC50 fish 2	40,761 mg/l (96 h; <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> ); Static system)
Threshold limit algae 1	> 10,000 mg/l (168 h; <i>Scenedesmus quadricauda</i> )
Threshold limit algae 2	2,000 mg/l (192 h; <i>Microcystis aeruginosa</i> )
<b>diethylene glycol (111-46-6)</b>	
LC50 fish 1	> 5,000 ppm (24 h; <i>Carassius auratus</i> )
LC50 other aquatic organisms 1	1,174 mg/l ( <i>Xenopus laevis</i> )
EC50 Daphnia 1	> 10,000 mg/l (24 h; <i>Daphnia magna</i> )
LC50 fish 2	61,072 ppm (168 h; <i>Poecilia reticulata</i> )
TLM fish 1	> 32,000 mg/l (96 h; <i>Gambusia affinis</i> )
TLM other aquatic organisms 1	> 1,000 ppm (96 h)
Threshold limit other aquatic organisms 1	1,174 mg/l (72 h; <i>Xenopus laevis</i> ; Toxicity test)
Threshold limit other aquatic organisms 2	10,745 mg/l (16 h; Protozoa; Toxicity test)
Threshold limit algae 1	2,700 mg/l (168 h; <i>Scenedesmus quadricauda</i> )
Threshold limit algae 2	100 mg/l ( <i>Selenastrum capricornutum</i> )

### 12.2. Persistence and degradability

<b>denatonium benzoate (3734-33-6)</b>	
Persistence and degradability	Biodegradability in water: no data available. No (test) data on mobility of the substance available.
<b>ethylene glycol (107-21-1)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.47 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.24 g O <sub>2</sub> /g substance
ThOD	1.29 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.36 % ThOD

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<b>diethylene glycol (111-46-6)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	0.02 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.51 g O <sub>2</sub> /g substance
ThOD	1.51 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.015 % ThOD

### 12.3. Bioaccumulative potential

<b>denatonium benzoate (3734-33-6)</b>	
Log Pow	1.78 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

<b>ethylene glycol (107-21-1)</b>	
BCF fish 1	10 (72 h; Leuciscus idus)
BCF other aquatic organisms 1	0.21 - 0.6 (Procambarus sp.; Chronic)
BCF other aquatic organisms 2	190 (24 h; Algae)
Log Pow	-1.34 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

<b>diethylene glycol (111-46-6)</b>	
Log Pow	-1.98
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

<b>ethylene glycol (107-21-1)</b>	
Surface tension	0.048 N/m (20 °C / 68 °F)

<b>diethylene glycol (111-46-6)</b>	
Surface tension	0.0485 N/m

### 12.5. Other adverse effects

Effect on ozone layer	: No known effect on the ozone layer
Effect on global warming	: No known ecological damage caused by this product.
Effect on global warming	: No additional information available
Other information	: Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT	
Transport document description	: UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III
UN-No.(DOT)	: 3082
DOT NA no.	: UN3082
Proper Shipping Name (DOT)	: Environmentally hazardous substances, liquid, n.o.s.
Department of Transportation (DOT) Hazard Classes	: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Hazard labels (DOT)	: 9 - Class 9 (Miscellaneous dangerous materials)



DOT Symbols	: G - Identifies PSN requiring a technical name
Packing group (DOT)	: III - Minor Danger
DOT Packaging Exceptions (49 CFR 173.xxx)	: 155



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DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: No limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: No limit
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Other information	: Non Bulk: Not regulated by the US D.O.T. (in quantities under 5,000 lbs in any one inner package).

### ADR

No additional information available

### Transport by sea

Proper Shipping Name (IMDG) : Not regulated by IMDG (in quantities under 5,000 lbs in any one inner package)

### Air transport

Proper Shipping Name (IATA) : Not regulated by IATA (in quantities under 5,000 lbs in any one inner package)

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<b>NAPA Dexcool Concentrate Antifreeze &amp; Coolant</b>	
EPA TSCA Regulatory Flag	Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed
<b>denatonium benzoate (3734-33-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>ethylene glycol (107-21-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb(s)
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Ethylene glycol is subject to Tier I and/or Tier II annual inventory reporting.
SARA Section 313 - Emission Reporting	Ethylene glycol is subject to Form R Reporting requirements.
<b>diethylene glycol (111-46-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>potassium 2-ethylhexanoate (3164-85-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2. International regulations

#### CANADA

<b>NAPA Dexcool Concentrate Antifreeze &amp; Coolant</b>	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

#### WHMIS Classification



Class D Division 2  
Subdivision A - Very  
toxic material  
causing other toxic  
effects

#### EU-Regulations

No additional information available

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### Classification according to Regulation (EC) No. 1272/2008 [CLP]

### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

### 15.2.2. National regulations

#### NAPA Dexcool Concentrate Antifreeze & Coolant

DSL (Canada): The intentional ingredients of this product are listed  
ECL (South Korea): The intentional ingredients of this product are listed.  
EINECS (Europe): The intentional ingredients of this product are listed  
ENCS (Japan): The intentional ingredients of this product are listed

### 15.3. US State regulations

#### ethylene glycol (107-21-1)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

#### diethylene glycol (111-46-6)

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

## SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure

NFPA health hazard

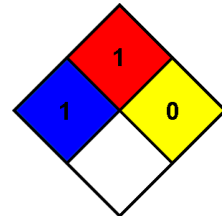
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard

Physical : 0 Minimal Hazard

Personal Protection : B

SDS GHS US (GHS HazCom 2012) OWI

*Old World Industries, LLC makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Old World Industries, LLC as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does Old World Industries, LLC assume liability arising out of the use by others of this product referred to herein. The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.*

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# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Disc Brake Quiet</b>
<b>Other means of identification</b>	
<b>Product code</b>	05015, 05016, 05115, 05116
<b>Recommended use</b>	Apply to brakes to decrease noise
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufactured or sold by:</b>	
<b>Company name</b>	CRC Industries, Inc.
<b>Address</b>	885 Louis Dr. Warminster, PA 18974 US
<b>Telephone</b>	
<b>General Information</b>	215-674-4300
<b>Technical Assistance</b>	800-521-3168
<b>Customer Service</b>	800-272-4620
<b>24-Hour Emergency (CHEMTREC)</b>	800-424-9300 (US) 703-527-3887 (International)
<b>Website</b>	www.crcindustries.com

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Specific target organ toxicity, repeated exposure	Category 2
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 3
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Warning
<b>Hazard statement</b>	May cause damage to organs (kidneys, liver, blood) through prolonged or repeated exposure. Harmful to aquatic life.
<b>Precautionary statement</b>	
<b>Prevention</b>	Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Do not breathe mist or vapor. Avoid release to the environment.
<b>Response</b>	Get medical advice/attention if you feel unwell.
<b>Storage</b>	Store away from incompatible materials.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	78.06% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Water		7732-18-5	20 - 30
Ethylene glycol		107-21-1	1 - 3
Triethanolamine		102-71-6	1 - 3
Diethanolamine		111-42-2	< 0.3

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

<b>Inhalation</b>	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
<b>Most important symptoms/effects, acute and delayed</b>	Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
<b>Environmental precautions</b>	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Provide adequate ventilation. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. For product usage instructions, please see the product label.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Protect from freezing. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Diethanolamine (CAS 111-42-2)	TWA	1 mg/m <sup>3</sup>	Inhalable fraction and vapor.
Ethylene glycol (CAS 107-21-1)	Ceiling	100 mg/m <sup>3</sup>	Aerosol.
Triethanolamine (CAS 102-71-6)	TWA	5 mg/m <sup>3</sup>	

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Diethanolamine (CAS 111-42-2)	TWA	15 mg/m <sup>3</sup> 3 ppm

**Biological limit values** No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

#### US - California OELs: Skin designation

Diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

#### US ACGIH Threshold Limit Values: Skin designation

Diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

**Appropriate engineering controls** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

#### Skin protection

**Hand protection** Wear protective gloves such as: Nitrile. Neoprene.

**Other** Wear suitable protective clothing.

**Respiratory protection** If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

**Physical state** Solid, Liquid.

**Form** Solid. Semi-solid paste.

**Color** Red.

**Odor** Acrylic.

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** -74.2 °F (-59 °C) estimated

**Initial boiling point and boiling range** 212 °F (100 °C) estimated

**Flash point** None (Tag Closed Cup)

**Evaporation rate** Slow.

**Flammability (solid, gas)** Not available.

### Upper/lower flammability or explosive limits

Flammability limit - lower (%)	0.7 % estimated
Flammability limit - upper (%)	15.3 % estimated

Vapor pressure	12.1 hPa estimated
Vapor density	Not available.
Relative density	1.03
Solubility (water)	Dispersible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	700 °F (371.1 °C) estimated
Decomposition temperature	Not available.
Viscosity (kinematic)	Not available.
Percent volatile	39.1 % estimated

## 10. Stability and reactivity

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Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Protect from freezing.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Acrylic monomers.

## 11. Toxicological information

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### Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Prolonged skin contact may cause temporary irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Swallowing this material may cause gastrointestinal discomfort. May cause damage to organs through prolonged or repeated exposure by ingestion.

Symptoms related to the physical, chemical and toxicological characteristics	Direct contact with eyes may cause temporary irritation.
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### Information on toxicological effects

Acute toxicity	Not available.
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Product	Species	Test Results
Disc Brake Quiet		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	9914 mg/kg estimated
<b>Inhalation</b>		
LC50	Rat	9650 ppm estimated 8666 mg/l, 4 Hours estimated 250 mg/l, 6 hours estimated
<b>Oral</b>		
LD50	Human	70000 mg/kg estimated
	Rat	9426 mg/kg estimated

\* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
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<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Risk of cancer cannot be excluded with prolonged exposure.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Diethanolamine (CAS 111-42-2)	2B Possibly carcinogenic to humans.
Triethanolamine (CAS 102-71-6)	3 Not classifiable as to carcinogenicity to humans.
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure by ingestion. Kidneys. Liver. Blood.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	May cause damage to organs through prolonged or repeated exposure. May be harmful if absorbed through skin. Prolonged exposure may cause chronic effects.
	Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

## 12. Ecological information

<b>Ecotoxicity</b>	Harmful to aquatic life.		
<b>Product</b>		<b>Species</b>	<b>Test Results</b>
Disc Brake Quiet			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	4618.0098 mg/l, 48 hours estimated
Fish	LC50	Fish	4543.5259 mg/l, 96 hours estimated
<b>Components</b>		<b>Species</b>	<b>Test Results</b>
Diethanolamine (CAS 111-42-2)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	61.8 - 86.04 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	100 mg/l, 96 hours
Ethylene glycol (CAS 107-21-1)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	41000 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	22810 mg/l, 96 hours
Triethanolamine (CAS 102-71-6)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	565.2 - 658.3 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	10610 - 13010 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

Diethanolamine	-1.43
Ethylene glycol	-1.36
Triethanolamine	-1

**Mobility in soil** No data available.



**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

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**Disposal of waste from residues / unused products** This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty containers may be recycled. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance with all applicable regulations.

**Hazardous waste code** Not regulated.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

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#### DOT

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

### 15. Regulatory information

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**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

#### **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

#### **SARA 304 Emergency release notification**

Not regulated.

#### **US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**

Ethylene glycol (CAS 107-21-1)

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Ethylene glycol (CAS 107-21-1) Listed.

#### **CERCLA Hazardous Substances: Reportable quantity**

Ethylene glycol (CAS 107-21-1) 5000 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

#### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Ethylene glycol (CAS 107-21-1)

#### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

#### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Section 311/312 Hazard categories** Immediate Hazard - No  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

#### **US state regulations**

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

Diethanolamine (CAS 111-42-2)

Ethylene glycol (CAS 107-21-1)

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. New Jersey Worker and Community Right-to-Know Act**

Triethanolamine (CAS 102-71-6)

Ethylene glycol (CAS 107-21-1)

Distillates (petroleum), hydrotreated heavy naphthenic (CAS 64742-52-5)

**US. Massachusetts RTK - Substance List**

Ethylene glycol (CAS 107-21-1)

Triethanolamine (CAS 102-71-6)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Ethylene glycol (CAS 107-21-1)

Acrylonitrile (CAS 107-13-1)

Diethanolamine (CAS 111-42-2)

Formaldehyde (CAS 50-00-0)

Triethanolamine (CAS 102-71-6)

**US. Rhode Island RTK**

Ethylene glycol (CAS 107-21-1)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

1,3-Dichloropropene (CAS 542-75-6)	Listed: January 1, 1989
1,4-Dioxane (CAS 123-91-1)	Listed: January 1, 1988
Acrylonitrile (CAS 107-13-1)	Listed: July 1, 1987
D&C ORANGE NO. 17 (CAS 3468-63-1)	Listed: July 1, 1990
Diethanolamine (CAS 111-42-2)	Listed: June 22, 2012
Ethanal (CAS 75-07-0)	Listed: April 1, 1988
Ethyl acrylate (CAS 140-88-5)	Listed: July 1, 1989
Ethylene oxide (CAS 75-21-8)	Listed: July 1, 1987
Formaldehyde (CAS 50-00-0)	Listed: January 1, 1988
Methylene chloride (CAS 75-09-2)	Listed: April 1, 1988

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

Ethylene oxide (CAS 75-21-8)	Listed: August 7, 2009
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**US - California Proposition 65 - CRT: Listed date/Female reproductive toxin**

Ethylene oxide (CAS 75-21-8)	Listed: February 27, 1987
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**US - California Proposition 65 - CRT: Listed date/Male reproductive toxin**

Ethylene oxide (CAS 75-21-8)	Listed: August 7, 2009
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**Volatile organic compounds (VOC) regulations**

**EPA**

**VOC content (40 CFR 51.100(s))** 4 %

**Consumer products (40 CFR 59, Subpt. C)** Not regulated

**State**

**Consumer products** Not regulated

**VOC content (CA)** 0.8 %

**VOC content (OTC)** 0.8 %

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

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<b>Issue date</b>	04-22-2015
<b>Prepared by</b>	Allison Cho
<b>Version #</b>	01
<b>Further information</b>	CRC # 562A-C
<b>HMIS® ratings</b>	Health: 1* Flammability: 0 Physical hazard: 0 Personal protection: B
<b>NFPA ratings</b>	Health: 1 Flammability: 0 Instability: 0

### NFPA ratings



### Disclaimer

CRC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.



# SAFETY DATA SHEET

## 1. Product Identification

Champion Brands, LLC  
1001 Golden Drive  
Clinton, MO 64093  
(660) 885-8151

**Product line:** CHAMPION® DOT 3 Hydraulic Brake Fluid  
**Products:** 4057, 5001  
**CAS:** Not applicable (Mixture)  
**Synonyms:** Glycol-Based Brake Fluid  
**Recommended use:** Disk and drum hydraulic brake fluid  
**Restrictions:** Do not use where DOT5 is specified  
**Created:** 6 April 2012  
**Revised:** 5 March 2015  
**Emergency phone:** CHEMTREC: (+1) 800-424-9300

## 2. Hazards Identification

**Appearance:** Clear, pale yellow liquid  
**Odor:** Mild, sweet odor  
**Classification(s):** Acute Toxicity, Oral Category 4\*  
 Skin Irritation, Category 2  
 Eye Irritation, Category 2A  
 Target Organ Toxicity, Acute Category 2  
**Target organs:** Kidney, Liver, Central Nervous System  
**Symbol(s):**



**Signal Word:** Warning  
**Hazard Statement(s):** Harmful if swallowed. Causes mild skin irritation. Causes serious eye irritation.

**Other hazard(s):** Combustible liquid. Repeated exposure may cause dryness of the skin. Vapors may cause respiratory irritation.

- Precaution(s):** Wear eye and skin protection before handling. Do not breathe mist/vapors/spray. Use in a well ventilated area. Wear protective gloves/protective clothing. IF IN EYES: Flush with water for 15 minutes and consult a physician. Do no ingest. IF SWALLOWED: Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
- Disposal:** Keep out of waterways. Check local, national, and international regulations for proper disposal
- HMIS (estimated):**     **Health – 3**     **Fire – 1**     **Instability – 0**

*\*Classified based on human experience and epistemological data, not based on strict application of the GHS criteria*

### 3. Composition/Information on Ingredients

#### Hazardous Ingredients:

Component	CAS No.	Conc (wt%)
Diethylene Glycol	111-46-6	20 – 40
2-(2-propoxyethoxy)ethanol	6881-94-3	0 – 30
2-(2-butoxyethoxy)ethanol	112-34-5	0 – 20
Ethoxytriglycol	112-50-5	0 – 20
Butoxytriglycol	143-22-6	30 – 70
Additives	Proprietary	< 1

### 4. First Aid Measures

- Eyes** Remove contact lenses, if worn. Rinse with running water for at least 15 minutes, lifting upper and lower eyelids occasionally. Seek medical attention.
- Skin** Remove affected clothing and launder before reuse. Wash affected area for at least 15 minutes with soap and running water. Prolonged or repeated exposure may cause defatting of the skin – symptoms include redness, dryness, cracking
- Inhalation** Remove exposed person to fresh air immediately. Restore or assist breathing, if necessary. Get medical attention immediately if symptoms of CNS depression or intoxication develop
- Ingestion** Do NOT induce vomiting. If conscious, give two full glasses of water. If a significant volume has been swallowed, get medical attention immediately.

Swallowing large amounts of diethylene glycol is potentially lethal. Immediate symptoms may include severe abdominal cramping, diarrhea, vomiting, intoxication, and hypertension. Infrequent urination and other cardiac, neurological, and renal effects of metabolic acidosis, hyponatremia, or hyperkalemia may develop. Diethylene glycol has been known to cause metabolic acidosis leading to kidney and liver failure, neurological complications, and death.

**Additional Info** Note to physician: Treat for diethylene glycol poisoning

**Specific Treatments** Immediately treat with hemodialysis. Diethylene glycol is metabolized by NAD-dependent alcohol dehydrogenase and aldehyde dehydrogenase into 2-hydroxyethoxyacetaldehyde and 2-hydroxyethoxyacetic acid, respectively. Administering NAD-dependent alcohol dehydrogenase inhibitors such as ethanol or fomepizole may slow the production of harmful metabolites.

## 5. Fire Fighting Measures

**NFPA (estimated):** Health – 2 Fire – 1 Instability – 0

**Flash Point** 93°C / 199°F (calculated)

**Extinguishing Media** For small fires use alcohol foam, dry chemical or CO<sub>2</sub>. For large fires apply large (flooding) quantities of water from as far away as possible in a spray or mist.

**Unsuitable Media** Water jet may be ineffective

**Firefighting Procedures:** Wear a self-contained breathing apparatus if necessary based on concentrations of smoke. Material will produce primarily oxides of carbon as combustion products.

**Unusual Hazards** Not Determined

## 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** Ventilate if released in a confined area. Avoid breathing mists/vapors/spray. Product may present slipping hazard if left on the floor. Beware of vapors pooling in low areas to explosive concentrations.

**Environmental precautions:** Avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways or groundwater

**Methods for removal:** Use an explosion-proof pump to remove bulk liquid. Residual liquid can be absorbed on inert material. Dispose of contaminated adsorbent as hazardous waste. Wash the area with water after excess product and adsorbent is removed.

## 7. Handling and Storage

**Max. Handling Temp:** Not determined

**Procedures:** Use in a well ventilated area. Avoid breathing mists/vapors/spray. Avoid handling hot product where possible. Use appropriate personal protective equipment to avoid contact with skin and eyes. Note the location of nearest emergency shower and eye wash station before use. Store with the lid tightly closed in a cool, dry, well-ventilated place. Product is hygroscopic and effectiveness may diminish if opened product is stored for long periods of time. Dispose of spilled or used material in accordance with local, regional, national, and international regulations.

**Max Store Temp:** Do not store or handle at elevated temperatures.

## 8. Exposure Controls/Personal Protection

### Exposure Limits

#### US

#### Guidelines by component

*Diethylene Glycol (CAS# 111-46-6)*

OSHA TWA: 10mg/m<sup>3</sup>

*Ethanolamine (CAS# 141-43-5)*

ACGIH TWA: 3 ppm

ACGIH STEL: 6 ppm

OSHA TWA: 3 ppm

OSHA STEL: 6 ppm

NIOSH TWA: 3 ppm

NIOSH STEL: 6 ppm

**Other Exposure Limits:** Not determined

**Engineering Controls:** Use in a well ventilated area. Local and general ventilation should keep methanol vapor concentration below permissible limits. Where exposure potential exceeds recommended limits, use a NIOSH/OSHA approved supplied air respirator

as recommended. Vapors are heavier than air and will tend to accumulate in low-lying areas.

### Personal Protective Equipment

**Respiratory:** Use a NIOSH or CEN approved full-face respirator with multi-purpose combination or type ABEK respirator cartridges as a backup to engineering controls. If the respiratory is the only means of protection, use a full-face supplied air respirator

**Eye:** Use tightly-fitting chemical splash goggles. Use face shield, especially where splashing is likely to occur

**Gloves:** Use nitrile, butyl, viton, or fluoroelastomer gloves. Even appropriate materials may degrade after prolonged exposure with product.

**Clothing:** Use chemical resistant pants and jackets, preferably of butyl or nitrile rubber

**Other:** Locate the nearest eyewash station and safety shower before handling this product. Limit exposure whenever possible.

**Hygiene:** Wash thoroughly after handling this product.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Clear, pale yellow liquid
<b>Odor</b>	Mild, sweet odor
<b>Odor threshold</b>	Not determined
<b>pH</b>	7 - 11
<b>Melting Point</b>	< -50°C / -58°F
<b>Initial Boiling Pt</b>	> 210°C / 410°F
<b>Flash Point</b>	93°C / 199°F
<b>Evaporation Rate</b>	Not determined
<b>Upper Flammable Lm</b>	Not determined
<b>Lower Flammable Lm</b>	Not determined
<b>Explosive Data</b>	Vapors may form explosive mixtures with air
<b>Vapor Pressure</b>	0.09 hPa (0.07 mmHg) @ 20° (68°F)
<b>Vapor Density</b>	> 5 (Air = 1)
<b>Volatile Organics</b>	Not determined
<b>Density</b>	1.05 mg/cu. cm @ 15.6°C
<b>Solubility</b>	Miscible in water, alcohol; sparingly soluble in some organic solvents
<b>K<sub>ow</sub></b>	Not determined
<b>Viscosity</b>	1.8 mm/s <sup>2</sup> @ 100°C
<b>Autoignition Point</b>	Not determined
<b>Decomposition Temp</b>	Not determined



## 10. Stability and Reactivity

<b>Stability</b>	Material is normally stable at ambient temperatures and pressures.
<b>Decomposition Temp</b>	Not determined
<b>Incompatibility</b>	Keep away from strong oxidizers and strong acids/bases. Keep away from zinc or other active metals
<b>Polymerization</b>	Will not occur
<b>Thermal Decomposition</b>	Primarily oxidizes to carbon dioxide in normal combustion conditions. In lower oxygen environments carbon monoxide, formaldehyde, or formic acid may be formed.
<b>Conditions to Avoid</b>	Vapors may catch fire – keep away from strong oxidizers, acids, bases as well as heat/sparks/open flames/hot surfaces

## 11. Toxicological Information

	<b>- Acute Exposure -</b>
<b>Eye Irritation</b>	Expected to cause mild to moderate irritation of the eye if exposed to liquid or in high vapor concentrations. May cause irritation, tearing, or burning of the eyes.
<b>Skin Irritation</b>	Expected to be mildly irritating to the skin. Symptoms of irritation may include redness, drying, and cracking of the skin.
<b>Respiratory Irritation</b>	High vapor concentrations may cause transient irritation to the respiratory system.
<b>Dermal Toxicity</b>	This product can be absorbed through the skin, but is of low order of toxicity. Limit exposure to skin where possible.
<b>Inhalation Toxicity</b>	Toxicity is similar to that for oral ingestion, though this exposure mode is far less likely to occur.
<b>Oral Toxicity</b>	Toxic or fatal if ingested. Symptoms of diethylene glycol poisoning include severe abdominal cramping, diarrhea, vomiting, sweating, confusion, cardiac abnormalities, neurological abnormalities, infrequent urination, intoxication or CNS depression. If left untreated, product will metabolize to cause metabolic acidosis, renal failure, hyperkalemia, hyponatremia, parylsis, cardiac failure, or death. Seek medical attention immediately for poisoning. If ingested, DO NOT wait for symptoms to develop before getting treatment.
<b>Aspiration Hazard</b>	This product has a very low viscosity and may be fatal if aspirated into the airways. Do NOT induce vomiting, as this increases risk of aspiration.
	<b>- Chronic Exposure -</b>
<b>Chronic Toxicity</b>	This product may cause dryness or defatting of the skin, dermatitis, or may aggravate existing skin conditions.

<b>Carcinogenicity</b>	This product and its components are NOT listed by the IARC, NTP, ACGIH, or OSHA as carcinogens
<b>Mutagenicity</b>	Available information does not suggest that this product is a germ cell mutagen
<b>Reproductive Toxicity</b>	Available information does not suggest that this product is a reproductive toxin.
<b>Teratogenicity</b>	Diethylene glycol has produced birth defects in rats at concentrations that are toxic to the mother.
<b>- Additional Information -</b>	
<b>Target organ toxicity</b>	Product is toxic to organs: Kidneys, liver, central nervous system, heart. Metabolic products of diethylene glycol produce acidosis and organ toxicity effects. In some cases, other metabolic abnormalities have been reported such as hyponatremia and hyperkalemia leading to nerve and cardiac damage.
<b>Synergistic effects</b>	Though specific data is not available, ethanol is a competing substrate for NAD-dependent alcohol dehydrogenase and may slow the product of harmful metabolic products of diethylene glycol.
<b>Pharmacokinetics</b>	No data available

## 12. Ecological Information

<b>- Environmental Toxicity -</b>	
<b>Freshwater Fish</b>	Acute LD50 > 75.2 g/L (96h)
<b>Freshwater Invertebrates</b>	Acute LD50 > 10g/l (24h)
<b>Algae</b>	Not determined
<b>Saltwater Fish</b>	Not determined
<b>Saltwater Invertebrates</b>	Not determined
<b>Bacteria</b>	Not determined
<b>Miscellaneous</b>	Not determined

<b>- Environmental Fate -</b>	
<b>Biodegradation</b>	No data available. Expected to biodegrade rapidly and degrade by photo-oxidative reactions with the air
<b>Bioaccumulation</b>	Product is very mobile in soil and water and is somewhat volatile – it is not expected to bioaccumulate.
<b>Soil Mobility</b>	Product has high mobility in soil, slowly evaporates at environmentally relevant temperatures
<b>Other Effects</b>	Not determined

## 13. Disposal Considerations

### Disposal Considerations

All disposal practices must be in accordance with local, regional, national, and international regulations. Store material for disposal as indicated in Section 7.

Disposal by controlled incineration or by secure land fill may be acceptable – review applicable regulations or regulatory bodies before making disposal decisions.

### Contaminated Containers or Packaging

Empty containers are likely to contain flammable vapors or explosive mixtures of vapor and air. Do NOT weld, cut, or grind empty containers. Rinse empty containers with water and dispose of in accordance with local, regional, national, and international regulations

## 14. Transportation Information

Description shown may not apply to all shipping situations. Consult applicable shipping codes to determine any additional shipping requirements

<b>US DOT</b>	Not dangerous goods
<b>IMDG</b>	Not dangerous goods
<b>ICAO/IATA</b>	Not dangerous goods

## 15. Regulatory Information

### - Global Chemical Inventories/Regulations -

<b>USA</b>	All components of this material are on the US TSCA
<b>Other TSCA Reg.</b>	None known
<b>EU</b>	Components of this product and similar mixtures are registered under REACH. Consult the European Chemicals Agency regarding REACH registration, reporting, and other legal requirements for methanol solutions before importing to the EU.
<b>New Zealand</b>	May require notification before sale under New Zealand Regulations
<b>Canada</b>	All components of this product are listed on the Canadian Domestic Substances List (DSL).
<b>Canada WHMIS</b>	B3

### - Other U.S. Federal Regulations -

<b>SARA Ext. Haz. Subst.</b>	No components listed as Extremely Hazardous Substances list. See 40 CFR 355	
<b>SARA Sect. 313</b>	2-(2-butoxyethoxy)ethanol (CAS # 112-34-5) and ethoxytriglycol (CAS # 112-50-5) are subject to reporting under SARA Title III, Section 313. See 40 CFR 372	
<b>SARA 311/312 Class</b>	<i>Acute Hazard</i>	- YES
	<i>Chronic Hazard</i>	- NO
	<i>Fire Hazard</i>	- NO

**CERCLA Haz. Sub.** *Reactivity Hazard* - NO  
No components listed. See 40 CFR 302

**CA Prop 65** **- State Regulations -**  
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

<b>Right to Know Component</b>	<b>Right to Know States</b>
2-(2-propoxyethoxy)ethanol (CAS # 6881-94-3)	NJ, PA
Diethylene glycol (CAS # 111-46-6)	NJ, PA
Butoxytriglycol (CAS # 134-22-6)	NJ, PA
Ethoxytriglycol (CAS # 112-50-5)	NJ, PA
Poly(1,2-dihydro-2,2,4-trimethylquinoline) (CAS # 26780-96-1)	NJ, PA
2-(2-butoxyethoxy)ethanol (CAS # 112-34-5)	NJ, PA
Ethanolamine (CAS # 141-43-5)	NJ, PA, MA
Benzotriazole (CAS # 95-14-7)	NJ, PA, MA
Sodium Nitrate (CAS # 7631-99-4)	NJ, PA

**- Other -**

## 16. Other Information

Revision updates may be in many sections and the MSDS should be read in its entirety.  
Prepared according to the UN Globally Harmonized System for the Classification and Labeling of Chemicals (GHS) by Champion LLC, 1001 Golden Drive, Clinton, Missouri 64735.

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CUSTOMER: 561832  
BATCH #: 1790023  
PICK ZONE: RW01  
PRODUCT NAME: DRI-LUBE PLUS AEROSOL, MM

ORDER #: 2259471  
DELIVERY ID: 13433128  
PICK SEQUENCE #: 3950  
BARCODE #: 12039442

## Safety Data Sheet: DRI-LUBE PLUS AEROSOL, MM

Supersedes Date 06/28/2011

Issuing Date 02/14/2014

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name DRI-LUBE PLUS AEROSOL, MM  
Recommended use Lubricant  
Information on Manufacturer  
CERTIFIED LABS, DIV. OF NCH CORP.  
BOX 152170  
IRVING, TEXAS 75015

Product Code 12039442  
Chemical nature Alcoholic solution  
Emergency Telephone Number

Telephone inquiry  
972-579-2477

### 2. HAZARD IDENTIFICATION

Color Dark gray

Physical State Liquid

Odor Alcoholic

#### GHS

##### Classification

##### Physical Hazards

Flammable aerosols  
Gases under pressure

Category 1  
Compressed Gas

##### Health Hazard

Aspiration Toxicity  
Acute Inhalation Toxicity - Gas  
Serious Eye Damage/Eye Irritation  
Reproductive Toxicity  
Specific target organ systemic toxicity (single exposure)  
Specific target organ systemic toxicity (repeated exposure)

Category 1  
Category 4  
Category 2  
Category 2  
Category 3  
Category 2

##### Other hazards

None

#### Labeling

##### Signal Word

DANGER



##### Hazard Statements

H222 - Extremely flammable aerosol  
H332 - Harmful if inhaled  
H336 - May cause drowsiness or dizziness  
H319 - Causes serious eye irritation  
H305 - May be harmful if swallowed and enters airways  
H373 - May cause damage to organs through prolonged or repeated exposure  
H361 - Suspected of damaging fertility or the unborn child  
H280 - Contains gas under pressure; may explode if heated

##### Precautionary Statements

P210 - Keep away from heat, sparks, open flames or hot surfaces.  
P251 - Pressurized container: Do not pierce or burn, even after use  
P270 - Do not eat, drink or smoke when using this product  
P260 - Do not breathe vapor, mist or gas  
P271 - Use in a well-ventilated area.  
P280 - Wear protective gloves, protective clothing and eye protection.  
P264 - Wash face, hands and any exposed skin thoroughly after handling.  
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
P312 - Call a physician if unwell.  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 - If eye irritation persists, get medical attention.  
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.  
P403 - Store in a well-ventilated place  
P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F  
P501 - Dispose of contents and container in accordance with applicable regulations.

2 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Isopropyl alcohol	67-63-0	40-70
Butane	106-97-8	10-30
Propane	74-98-6	7-13
Molybdenum disulfide	1317-33-5	1-5
Ethylcellulose	9004-57-3	1-5
Pseudocumene	95-63-6	1-5
Urea	57-13-6	1-5
Petroleum naphtha, light aromatic	64742-95-6	1-5
1,3,5-Trimethylbenzene	108-67-8	0.1-1
Xylenes (o-, m-, p- isomers)	1330-20-7	0.1-1

### 4. FIRST AID MEASURES

<b>General advice</b>	Avoid breathing vapors, mist, or gas. Avoid contact with skin, eyes and clothing.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.
<b>Inhalation</b>	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
<b>Ingestion</b>	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.
<b>Notes to physician</b>	Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

### 5. FIRE-FIGHTING MEASURES

<b>Flash Point</b>	47 °F / 8 °C	<b>Method</b>	Seta closed cup
<b>Flammability Limits in Air % Mixture.</b>		<b>Upper</b>	12.7
<b>Suitable Extinguishing Media</b>		<b>Lower</b>	1.8
<b>Water spray. Carbon dioxide (CO2). Foam. Dry chemical.</b>			
<b>Specific hazards arising from the chemical</b>			
<b>Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. Flame extension: &gt;36 inches / &gt;91.4 cm and Burnback: 6 inch / 15 cm.</b>			
<b>Protective Equipment and Precautions for Firefighters</b>			
<b>As in any fire, wear self-contained breathing apparatus pressure -demand, MSHA/NIOSH (approved or equivalent) and full protective gear.</b>			
<b>Aerosol Level (NFPA 30B) -</b>	3		
<b>NFPA</b>	<b>Health 2</b>	<b>Flammability 4</b>	<b>Instability 0</b>
<b>HMIS</b>	<b>Health 2</b>	<b>Flammability 4</b>	<b>Instability 0</b>

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Remove all sources of ignition. Ensure adequate ventilation. Use personal protective equipment. Prevent further leakage or spillage if safe to do so. Material can create slippery conditions.
<b>Environmental Precautions</b>	Do not flush into surface water or sanitary sewer system.
<b>Methods for Containment</b>	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
<b>Methods for Cleaning Up</b>	Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.
<b>Neutralizing Agent</b>	Not applicable.

### 7. HANDLING AND STORAGE

<b>Handling</b>	Keep away from open flames, hot surfaces and sources of ignition. Avoid breathing vapors, mist or gas. Avoid contact with skin, eyes and clothing.
<b>Storage</b>	Keep away from heat and sources of ignition.
<b>Storage Temperature</b>	<b>Minimum</b> 35 °F / 2 °C <b>Maximum</b> 120 °F / 49 °C
<b>Storage Conditions</b>	<b>Indoor</b> X <b>Outdoor</b> <b>Heated</b> <b>Refrigerated</b>

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

## Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Isopropyl alcohol	TWA: 200 ppm STEL: 400 ppm	TWA: 400 ppm TWA: 980 mg/m <sup>3</sup>	IDLH: 2000 ppm STEL: 500 ppm STEL: 1225 mg/m <sup>3</sup> TWA: 400 ppm TWA: 980 mg/m <sup>3</sup>
Butane	STEL: 1000 ppm	No data available	TWA: 800 ppm TWA: 1800 mg/m <sup>3</sup>
Propane	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>	IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>
Molybdenum disulfide	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup>	IDLH: 5000 mg/m <sup>3</sup>
Ethylcellulose	No data available	No data available	No data available
Pseudocumene	No data available	No data available	TWA: 25 ppm TWA: 125 mg/m <sup>3</sup>
Urea	No data available	No data available	No data available
Petroleum naphtha, light aromatic	No data available	No data available	No data available
1,3,5-Trimethylbenzene	No data available	No data available	TWA: 25 ppm TWA: 125 mg/m <sup>3</sup>
Xylenes (o-, m-, p- isomers)	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>	No data available

### Engineering Measures

Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas.

### Personal Protective Equipment

#### Eye/Face Protection

Safety glasses with side-shields.

#### Skin Protection

Wear suitable protective clothing. Impervious gloves.

#### Respiratory Protection

In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

### General Hygiene Considerations

Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Viscosity	Slightly Viscous
Color	Dark gray	Odor	Alcoholic
Odor Threshold	Not applicable	Appearance	Opaque
pH	Not applicable	Specific Gravity	0.708
Evaporation Rate	51.5 (Butyl acetate=1)	Percent Volatile (Volume)	98.7
VOC Content (%)	95	VOC Content (g/L)	672
Vapor Pressure	1323 mmHg @ 70°F	Vapor Density	1.9 (Air = 1.0)
Solubility	Dispersible	n-Octanol/Water Partition	No data available
Melting Point/Range	No data available	Decomposition Temperature	No data available
Boiling Point/Range	180 °F / 82 °C	Flammability (solid, gas)	No data available
Flash Point	47 °F / 8 °C	Method	Seta closed cup
Autoignition Temperature	No information available.		
Flammability Limits in Air %	Mixture.	Upper 12.7 Lower 1.8	

## 10. STABILITY AND REACTIVITY

### Chemical Stability

Stable. Hazardous polymerization does not occur.

### Conditions to Avoid

Keep away from open flames, hot surfaces, and sources of ignition

### Incompatible Products

Strong oxidizing agents, Acids, Bases, Aldehydes, Ketones, Halogenated hydrocarbon.

### Hazardous Decomposition Products

Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides.

### Possibility of Hazardous Reactions

None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Product Information

The following values are calculated based on chapter 3.1 of the GHS document (Rev. 3, 2009):

Oral LD50	4,542.61
Dermal LD50	10,926.28
Inhalation LC50	
Gas	4,073.20
Mist	51.57

Vapor

91.98

**Principle Route of Exposure**

Inhalation, Skin contact, Eye contact.

**Primary Routes of Entry**

Inhalation, Skin Absorption.

**Acute Effects****Eyes**

Causes eye irritation.

**Skin**

May cause skin irritation. Repeated exposure may cause skin dryness or cracking.

**Inhalation**

May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

**Ingestion**

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Causes headache, drowsiness or other effects to the central nervous system. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

**Chronic Toxicity**

Ingestion may cause lowering of blood pressure. Liver and kidney injuries may occur. Contains a known or suspected reproductive toxin.

**Target Organ Effects**

Respiratory system, Central nervous system, Liver, Kidney, Heart, Blood, Skin, Eyes, Bone, Ears.

**Aggravated Medical Conditions**

Respiratory disorders, Skin disorders, Liver disorders, Kidney disorders, Blood disorders, Neurological disorders, Heart disease.

**Component Information****Acute Toxicity**

None known

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Dralze Test	Other
Isopropyl alcohol	= 4396 mg/kg ( Rat )	= 12800 mg/kg ( Rabbit )	= 16000 ppm ( Rat ) 8 h	no data available	no data available
Butane	no data available	no data available	= 658 g/m <sup>3</sup> ( Rat ) 4 h	no data available	no data available
Propane	no data available	no data available	= 658 mg/L ( Rat ) 4 h	no data available	no data available
Molybdenum disulfide	no data available	no data available	> 2820 mg/m <sup>3</sup> ( Rat ) 4 h	no data available	no data available
Ethylcellulose	no data available	no data available	no data available	no data available	no data available
Pseudocumene	= 3400 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	= 18 g/m <sup>3</sup> ( Rat ) 4 h	no data available	no data available
Urea	14,300-15,000 mg/kg (rat)	no data available	no data available	no data available	no data available
Petroleum naphtha, light aromatic	no data available	> 2000 mg/kg ( Rabbit )	> 5.2 mg/L ( Rat ) 4 h = 3400 ppm ( Rat ) 4 h	no data available	no data available
1,3,5-Trimethylbenzene	no data available	no data available	= 24 g/m <sup>3</sup> ( Rat ) 4 h	no data available	no data available
Xylenes (o-, m-, p- isomers)	= 4300 mg/kg ( Rat )	> 1700 mg/kg ( Rabbit )	= 47635 mg/L ( Rat ) 4 h	no data available	no data available

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Isopropyl alcohol	no data available	no data available	no data available	no data available	eyes, respiratory system, skin, liver, kidney, CNS
Butane	no data available	no data available	no data available	no data available	CNS, heart
Propane	no data available	no data available	no data available	no data available	CNS, heart
Molybdenum disulfide	no data available	no data available	no data available	no data available	respiratory system, kidneys, eyes, blood, bones, joints
Ethylcellulose	no data available	no data available	no data available	no data available	no data available
Pseudocumene	no data available	no data available	no data available	no data available	eyes, CNS, respiratory system, skin, blood, ears, heart
Urea	no data available	no data available	no data available	no data available	no data available
Petroleum naphtha, light aromatic	no data available	no data available	no data available	no data available	CNS
1,3,5-Trimethylbenzene	no data available	no data available	no data available	no data available	eyes, CNS, respiratory system, skin, blood, ears, heart
Xylenes (o-, m-, p- isomers)	no data available	no data available	yes	no data available	heart, lung, CNS, PNS, respiratory system, ears, liver, kidney

**Carcinogenicity**

Component	ACGIH	IARC	NTP	OSHA	Other
Isopropyl alcohol	not applicable	not applicable	not applicable	not applicable	not applicable
Butane	not applicable	not applicable	not applicable	not applicable	not applicable
Propane	not applicable	not applicable	not applicable	not applicable	not applicable
Molybdenum disulfide	not applicable	not applicable	not applicable	not applicable	not applicable
Ethylcellulose	not applicable	not applicable	not applicable	not applicable	not applicable
Pseudocumene	not applicable	not applicable	not applicable	not applicable	not applicable
Urea	not applicable	not applicable	not applicable	not applicable	not applicable
Petroleum naphtha, light aromatic	not applicable	not applicable	not applicable	not applicable	not applicable
1,3,5-Trimethylbenzene	not applicable	not applicable	not applicable	not applicable	not applicable
Xylenes (o-, m-, p- isomers)	not applicable	not applicable	not applicable	not applicable	not applicable



## 12. ECOLOGICAL INFORMATION

**Product Information** No information available.

**Component Information**

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
Isopropyl alcohol	EC50 > 1000 mg/L Desmodesmus subspicatus 96 h EC50 > 1000 mg/L Desmodesmus subspicatus 72 h	LC50 = 9640 mg/L Pimephales promelas 96 h LC50 = 11130 mg/L Pimephales promelas 96 h LC50 > 1400000 µg/L Lepomis macrochirus 96 h	EC50 = 35390 mg/L 5 min	EC50= 13299 mg/L 48 h	0.05
Butane	no data available	no data available	no data available	no data available	2.89
Propane	no data available	no data available	no data available	no data available	2.3
Molybdenum disulfide	no data available	no data available	no data available	no data available	N/A
Ethylcellulose	no data available	no data available	no data available	no data available	N/A
Pseudocumene	no data available	LC50 7.19 - 8.28 mg/L Pimephales promelas 96 h	no data available	EC50= 6.14 mg/L 48 h	3.63
Urea	no data available	LC50 16200 - 18300 mg/L Poecilia reticulata 96 h	EC50 = 23914 mg/L 5 min	EC50> 10000 mg/L 24 h EC50= 3910 mg/L 48 h	-1.59
Petroleum naphtha, light aromatic	no data available	LC50 = 9.22 mg/L Oncorhynchus mykiss 96 h	no data available	EC50= 6.14 mg/L 48 h	N/A
1,3,5-Trimethylbenzene	no data available	LC50 = 3.48 mg/L Pimephales promelas 96 h	no data available	EC50= 50 mg/L 24 h	N/A
Xylenes (o-, m-, p- isomers)	no data available	LC50 = 13.4 mg/L Pimephales promelas 96 h LC50 2.661 - 4.093 mg/L Oncorhynchus mykiss 96 h LC50 13.5 - 17.3 mg/L Oncorhynchus mykiss 96 h LC50 13.1 - 16.5 mg/L Lepomis macrochirus 96 h LC50 = 19 mg/L Lepomis macrochirus 96 h LC50 7.711 - 9.591 mg/L Lepomis macrochirus 96 h LC50 23.53 - 29.97 mg/L Pimephales promelas 96 h LC50 = 780 mg/L Cyprinus carpio 96 h LC50 > 780 mg/L Cyprinus carpio 96 h LC50 30.26 - 40.75 mg/L Poecilia reticulata 96 h	EC50 = 0.0084 mg/L 24 h	EC50= 3.82 mg/L 48 h LC50= 0.6 mg/L 48 h	2.77 - 3.15

**Persistence and Degradability** No information available.  
**Bioaccumulation** No information available.  
**Mobility** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Product Disposal** Dispose of in accordance with local regulations.  
**Container Disposal** Contents under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal.

## 14. TRANSPORT INFORMATION

**DOT**  
**Proper Shipping Name** Consumer commodity  
**Hazard Class** ORM-D  
**Description** Consumer commodity ,ORM-D,

**TDG**  
**Proper shipping name** Aerosols  
**Hazard Class** 2.1  
**UN-No** UN1950

**ICAO**  
**UN-No** UN1950  
**Proper Shipping Name** Aerosols

Hazard Class 2.1  
 Shipping Description Aerosols, UN1950 2.1 LTD. QTY.

**IATA**

UN-No UN1950  
 Proper Shipping Name Aerosols, flammable  
 Hazard Class 2.1  
 ERG Code 10L  
 Shipping Description UN1950, Aerosols, flammable, 2.1 LTD. QTY.

**IMDG/IMO**

Proper Shipping Name Aerosols  
 Hazard Class 2  
 UN-No UN1950  
 EmS No. F-D, S-U  
 Shipping Description UN1950, Aerosols, 2.1 LTD QTY.

**15. REGULATORY INFORMATION**

**Inventories**

TSCA Complies  
 DSL Complies

**U.S. Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Isopropyl alcohol	67-63-0	40-70	1.0
Pseudocumene	95-63-6	1-5	1.0
Xylenes (o-, m-, p- isomers)	1330-20-7	0.1-1	1.0

**SARA 311/312 Hazardous Categorization**

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	Yes	Yes	No

**CERCLA**

Component	Hazardous Substances RQs	CERCLA EHS RQs
Isopropyl alcohol	Not applicable	Not applicable
Butane	Not applicable	Not applicable
Propane	Not applicable	Not applicable
Molybdenum disulfide	Not applicable	Not applicable
Ethylcellulose	Not applicable	Not applicable
Pseudocumene	Not applicable	Not applicable
Urea	Not applicable	Not applicable
Petroleum naphtha, light aromatic	Not applicable	Not applicable
1,3,5-Trimethylbenzene	Not applicable	Not applicable
Xylenes (o-, m-, p- isomers)	100 lb	Not applicable

**16. OTHER INFORMATION**

Prepared By Angela Hutson  
 Supersedes Date 06/28/2011  
 Issuing Date 02/14/2014  
 Reason for Revision No information available.  
 Glossary No information available.  
 List of References. No information available.

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## SAFETY DATA SHEET

### NAPA DOT 3 BRAKE FLUID

#### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Issue Date: March 5, 2014

Revised: April 2, 2015

**Product Name:** NAPA DUTY DOT 3 BRAKE FLUID

**Synonyms:** Brake Fluid

**CAS Number:** Mixture, see Section 3

**Chemical Formula:** Mixture

**General Use:** Brake Fluid

**Manufacturer:** Warren Unilube, Inc., 915 E. Jefferson, West Memphis, AR 72301

**24-HOUR EMERGENCY NUMBER – CHEMTREC:** 1-800-424-9300

**WARREN UNILUBE PHONE:** (800) 428-9284

**FAX:** (870) 400-3070

#### Restrictions on Use:

**FOR LABELS FOR THE GENERAL PUBLIC:** If medical advice is needed, have product container or label at hand.

Keep out of reach of children and animals.

Read label before use.

**FOR THE INDUSTRIAL WORKER:** Industrial use only.

#### SECTION 2: HAZARD(S) IDENTIFICATION

##### Hazard Classification:

**OSHA Hazards:** Target Organ Effect, Harmful by ingestion, Irritant, Teratogen, Reproductive hazard

**Target Organs:** Kidney, Liver, Central nervous system, Female reproductive system, Male reproductive system, Blood.

**GHS Classification:**

- Acute toxicity, dermal (Category 5)
- Acute toxicity, oral (Category 4)
- Skin Irritation (Category 3)
- Serious eye damage (Category 1)
- Reproductive toxicity (Category 2)



**Signal Word: WARNING**

**Hazard Statements:**

- |      |   |
|------|---|
| H302 | Harmful if swallowed                                |
| H313 | May be harmful in contact with skin                 |
| H316 | Causes mild skin irritation                         |
| H318 | Causes serious eye damage                           |
| H361 | Suspected of damaging fertility or the unborn child |

**Precautionary Statements:**

- |                    |   |
|--------------------|---|
| P201               | Obtain special instructions before use.   |
| P202               | Do not handle until all safety instructions have been read and Understood.  |
| P264               | Wash thoroughly after handling.   |
| P270               | Do not eat, drink or smoke when using this product.   |
| P280               | Wear eye protection / face protection.  |
| P301 +P312         | IF SWALLOWED: Call a POISON CENTER or doctor / physician immediately.   |
| P330               | IF SWALLOWED: Rinse mouth.  |
| P312               | IF ON SKIN: Call a POISON CENTER or doctor / physician if you feel unwell.  |
| P332 + P313        | If skin irritation occurs: Get medical advise / attention.  |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. |
| P310               | IF IN EYES: Immediately call a POISON CENTER or doctor / physician.   |
| P308 + P313        | If exposed or concerned: Get medical advice / attention.  |

20-80% of the mixture consists of ingredients of unknown acute toxicity.

**HMIS Classification**

Health hazard: 1  
 Chronic Health Hazard  
 Flammability 1  
 Physical hazards 0

**NFPA Rating**

Health hazard: 1  
 Fire: 1  
 Reactivity 0

**Description of Any Other Hazards Not Otherwise Classified:** none known.

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

<u>INGREDIENT Name:</u>	<u>CAS NUMBER</u>	<u>%wt. or %V</u>
Triethylene Glycol Monomethyl Ether	112-35-6	5-50
Triethylene Glycol Monoethyl Ether	112-50-5	5-50
Triethylene Glycol Monobutyl Ether	143-22-6	5-50
Tetrathylene Glycol Monobutyl Ether	1559-34-8	5-20
Polyethylene Glycol	25322-68-3	5-20
Diethylene Glycol Monobutyl Ether	112-34-5	5-20
Diethylene Glycol	111-46-6	5-15
Diethylene Glycol Monomethyl Ether	111-77-3	<5
Diethylene Glycol Monoethyl Ether	111-90-0	<5
Polyalkylene Glycol Monobutyl Ether	9004-77-7	5-20
Polyalkylene Glycol Monomethyl Ether	23783-42-8	5-20
Polyalkylene Glycols	9038-95-3	5-20
Trade Secret Inhibitor Package	Trade Secret	3

**3% of the composition of this material has been withheld as a trade secret.**

**SECTION 4: FIRST AID MEASURE**

**EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation continues or persists, get medical advice / attention.

**SKIN:** Wash with plenty of soap and water. If skin irritation occurs, get medical advice / attention.

**INGESTION:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**INHALATION:** Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** Treatment should be directed at the control of symptoms and the clinical condition of the patient.

#### **SECTION 5: FIRE-FIGHTING MEASURES**

**SUITABLE EXTINGUISHING MEDIA:** Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak, and disperse vapors.

**UNSUITABLE EXTINGUISHING MEDIA:** Direct water stream.

**SPECIAL FIRE FIGHTING PROCEDURES:** Evacuate area. Do not use direct water stream to extinguish fires. Do not release runoff from fire control methods to sewers or waterways.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None known.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, and unidentified organic compounds.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS:** Wear full protective clothing and NIOSH – approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive breathing mode.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**PERSONAL PRECAUTIONS:** Use appropriate personal protective equipment. Avoid breathing vapors, mist or gas. Avoid contact with spilled material. Insure adequate ventilation. Remove all sources of ignition. Use non-sparking tools and equipment.

**PROTECTIVE CLOTHING:** Standard work uniform. Impervious gloves. Safety glasses. Personnel should increase PPE level as deemed appropriate in any given situation.

#### **EMERGENCY PROCEDURES:**

**SMALL SPILLS:** Contain and recover liquid when possible. Collect liquid in appropriate container or absorb with an inert material (such as vermiculite or dry sand) and place in chemical waste container. Do not use combustible materials such as sawdust for the cleanup.

#### **LARGE SPILLS:**

**Containment:** Shut off source of leak if safe to do so. Dike far ahead of liquid spill for later disposal. Do not allow material to enter sewers or waterways.

**Cleanup:** Contain and recover liquid when possible. Collect liquid in appropriate container. Absorb residue with an inert material (such as vermiculite or dry sand) and place in chemical waster container. Do not use combustible materials such as sawdust for the cleanup.

## SECTION 7: HANDLING AND STORAGE

**HANDLING PRECAUTIONS:** May be harmful or fatal if swallowed.

**STORAGE REQUIREMENTS:** Store in a cool dry, ventilated area.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Controls should be such that adequate ventilation is provided.

**VENTILATION:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work place by controlling it at its source.

**RESPIRATORY PROTECTION:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA / NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (e.g. cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**EYE PROTECTION:** Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.

**SKIN PROTECTION:** Wear chemically protective gloves, boots, aprons and gauntlets to prevent prolonged or repeated skin contact.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Make emergency eyewash stations, safety / quick drench showers and washing facilities available in work areas.

**WORK HYGIENIC PRACTICES:** Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material especially before eating, drinking or smoking, using the toilet, or applying cosmetics. Separate contaminate work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. Discard belts and shoes that cannot be cleaned.

### EXPOSURE GUIDELINES:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		USA WEEL
	TWA	STEL	TWA	STEL	TWA	STEL	
Triethylene Glycol Monomethyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.

Triethylene Glycol Monoethyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Triethylene Glycol Monobutyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Tetraethylene Glycol Monobutyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Polyethylene Glycol	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	10 mg/m3
Diethylene Glycol Monobutyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Diethylene Glycol	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	10 mg/m3
Diethylene Glycol Monomethyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	25 ppm
Diethylene Glycol Monoethyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Diethylene Glycol Monobutyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Polyalkylene Glycol Monobutyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Polyalkylene Glycol Monomethyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Polyalkylene Glycols	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Inhibitor Package	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**APPEARANCE AND COLOR:** Yellow to amber

**ODOR:** Mild

**FLASH POINT:** >275°F (>135°C)

**UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:** not available

**AUTO IGNITION TEMPERATURE:** not available

**DECOMPOSITION TEMPERATURE:** not available

**VAPOR PRESSURE:** not available

**ODOR THRESHOLD:** not available



**VAPOR DENSITY (air = 1):** >1

**pH:** 10.0 – 11.5

**RELATIVE DENSITY:** 8.33 – 9.02 lb/gal

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1 AT 4 C):** 1.000 – 1.070

**MELTING POINT / FREEZING POINT:** not available

**WATER SOLUBILITY:** soluble

**OTHER SOLUBILITIES:** not available

**INITIAL BOILING POINT AND BOILING RANGE:** 480°F (248.9°C), boiling range not available

**EVAPORATION RATE (BuAc = 1):** <0.01

**PARTITION COEFFICIENT: n-OCTANOL/WATER:** not available

**VISCOSITY:** not available

**REFRACTIVE INDEX:** not available

**FORMULA WEIGHT:** mixture

## **SECTION 10: STABILITY AND REACTIVITY**

**REACTIVITY:** none under normal handling.

**STABILITY:** stable at room temperature in closed containers under normal storage and handling conditions.

**CONDITIONS TO AVOID (STABILITY):** none known.

**INCOMPATIBILITY (MATERIAL TO AVOID):** none known.

**HAZARDOUS DECOMPOSITION BY-PRODUCTS:** Thermal oxidative decomposition can produce carbon monoxide, carbon dioxide and unknown organic compounds.

**HAZARDOUS POLYMERIZATION:** Hazardous polymerization will not occur.

**CONDITIONS TO AVOID (POLYMERIZATION):** Hazardous polymerization will not occur.

**HAZARDOUS POLYMERICATION BY-PRODUCTS:** Hazardous polymerization will not occur.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

**SIGNS AND SYMPTOMS OF OVEREXPOSURE:** Swallowing larger amounts may cause nausea and vomiting, abdominal discomfort or diarrhea. May cause dizziness and drowsiness.

### **ACUTE EFFECTS:**

**EYE CONTACT:** May cause slight eye irritation. May cause slight corneal injury.

**SKIN CONTACT:** Brief contact is essentially nonirritating to skin.

**INHALATION:** At room temperature, exposure to vapor is minimal due to low volatility. Mist may cause irritation of the upper respiratory tract.

**INGESTION:** Toxic or fatal if ingested. For diethylene glycol, a component of this mixture, a lethal dose can be as little as two ounces. Symptoms of diethylene glycol poisoning include severe abdominal cramping, diarrhea, vomiting, sweating, confusion, cardiac abnormalities, neurological abnormalities, infrequent urination, intoxication or CNS depression. If left untreated, product will metabolize to cause metabolic acidosis, renal failure, hyperkalemia, hyponatremia, paralysis, cardiac failure or death. Seek medical attention immediately for poisoning. If ingested, DO NOT wait for symptoms to develop before getting treatment.

**TARGET ORGAN EFFECTS:** Product is toxic to kidneys, liver, central nervous system and heart. Metabolic products of diethylene glycol produce acidosis and organ toxicity effects.

**CHRONIC EFFECTS:** May cause dryness or defatting of the skin, dermatitis, or may aggravate existing skin conditions.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Various skin conditions.

### **ACUTE TOXICITY VALUES**

#### **Triethylene Glycol Monomethyl Ether**

**ORAL LD50 (rat):** 11,842 mg/kg

**DERMAL LD50 (rabbit):** 7,441 mg/kg

**INHALATION LC50 (state animal):** data unavailable

#### **Triethylene Glycol Monoethyl Ether**

**ORAL LD50 (state animal):** data unavailable

**DERMAL LD50 (state animal):** data unavailable

**INHALATION LC50 (state animal):** data unavailable

#### **Tetraethylene Glycol Monobutyl Ether**

**ORAL LD50 (rat):** 5,300 mg/kg

**DERMAL LD50 (rabbit):** 3,505 mg/kg

**INHALATION LC50 (state animal):** data unavailable

#### **Polyethylene Glycol**

**ORAL LD50 (state animal):** data unavailable

**DERMAL LD50 (state animal):** data unavailable

**INHALATION LC50 (state animal):** data unavailable

#### **Diethylene Glycol Monobutyl Ether**

**ORAL LD50 (rat):** 5,660 mg/kg

**DERMAL LD50 (rabbit):** 2,700 mg/kg

**INHALATION LC50 (state animal):** data unavailable

#### **Diethylene Glycol**

**ORAL LD50 (rat):** 12,565 mg/kg

**DERMAL LD50 (rabbit):** 11,890 mg/kg

**INHALATION LC50 (state animal):** data unavailable

**Diethylene Glycol Monomethyl Ether**

**ORAL LD50 (rat):** >7,000 mg/kg

**DERMAL LD50 (rabbit):** >20,400 mg/kg

**INHALATION LC50 (state animal):** data unavailable

**Diethylene Glycol Monoethyl Ether**

**ORAL LD50 (rat):** 10,502 mg/kg

**DERMAL LD50 (rabbit):** 9,143 mg/kg

**INHALATION LC50 (state animal):** data unavailable

**Polyalkylene Glycol Monobutyl Ether**

**ORAL LD50 (rat):** >2,000 mg/kg

**DERMAL LD50 (rat):** >2,000 mg/kg

**INHALATION LC50 (state animal):** data unavailable

**Polyalkylene Glycol Monomethyl Ether**

**ORAL LD50 (state animal):** data unavailable

**DERMAL LD50 (state animal):** data unavailable

**INHALATION LC50 (state animal):** data unavailable

**Polyalkylene Glycols**

**ORAL LD50 (state animal):** data unavailable

**DERMAL LD50 (state animal):** data unavailable

**INHALATION LC50 (state animal):** data unavailable

**LISTED CARCINOGEN:**

**NATIONAL TOXICOLOGY PROGRAM REPORT ON CARCINOGENS:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**IARC LISTED AS POTENTIAL CARCINOGEN:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA LISTED AS POTENTIAL CARCINOGEN:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**SECTION 12: ECOLOGICAL INFORMATION**

**DATA FROM TOXICITY TESTS ON AQUATIC AND/OR TERRESTRIAL ORGANISMS:**

**Triethylene Glycol Monoethyl Ether:** data unavailable

**Triethylene Glycol Monobutyl Ether:** data unavailable

**Tetraethylene Glycol Monobutyl Ether:** data unavailable

**Polyethylene Glycol**

Fish: LC50 – Leuciscus idus (Golden orfe) <500 mg/l

Daphnia: data unavailable

**Diethylene Glycol Monobutyl Ether**

Fish: LC50 – Lepomis macrochirus – 1,300 mg/l – 96h

LC50 – Leuciscus idus (Golden orfe) – >1,000 mg/l – 48h

Daphnia: data unavailable

**Diethylene Glycol**

Fish: LC50 – Pimephales promelas (fathead minnow) – 75,200 mg/l – 96h

LC50 – Carassius auratus (goldfish) – 5,000 mg/l – 24h

Daphnia: EC50 – Daphnia magna (Water flea) - >10,000 mg/l – 24h

**Diethylene Glycol Monomethyl Ether**

Fish: LC50 – Lepomis macrochirus – 7,500 mg/l – 96h

Daphnia: data unavailable

**Diethylene Glycol Monoethyl Ether**

Fish: LC50 – Pimephales promelas (fathead minnow) – 9,650 mg/l – 96h

Daphnia: EC50 – Daphnia magna (Water flea) - >3,340 mg/l – 24h

**Polyalkylene Glycol Monobutyl Ether:** data unavailable

**Polyalkylene Glycol Monomethyl Ether:** data unavailable

**Polyalkylene Glycols:** data unavailable

**ENVIRONMENTAL FATE:** data unavailable for mixture

**BIOACCUMULATION POTENTIAL:** data unavailable for mixture

**POTENTIAL TO MOVE FROM SOIL TO GROUNDWATER:** data unavailable for mixture

**OTHER ADVERS ENVIRONMENTAL EFFECTS:** data unavailable for mixture

**SECTION 13: DISPOSAL CONSIDERATIONS**

**CONTAINERS TO USE:** No specific recommendations

**RECOMMENDED DISPOSAL METHODS:** Whatever cannot be saved for recovery or recycling should be disposed of in an approved waste facility in accordance with Federal, State/Provincial and Local requirements.

**PHYSICAL AND CHEMICAL PROPERTIES THAT MAY AFFECT DISPOSAL ACTIVITIES:**  
No specific information available.

**WHENEVER POSSIBLE, MATERIAL SHOULD NOT BE ALLOWED TO ENTER SEWAGE DISPOSAL SYSTEMS.**

**SPECIAL PRECAUTIONS FOR LANDFILL OR INCINERATION ACTIVITIES:** No specific information available.

**SECTION 14: TRANSPORT INFORMATION**

**U.S. DEPARTMENT OF TRANSPORTATION (49 CFR 172.101)**

**PROPER SHIPPING NAME:** DOT 3 Brake Fluid

DOT Non-Bulk: Not Regulated

DOT Bulk: Not Regulated

**IATA**

Not Dangerous Goods

**IMDG**

Not Dangerous Goods

**SECTION 15: REGULATORY INFORMATION**

**U.S. FEDERAL REGULATIONS**

**TSCA (TOXIC SUBSTANCE CONTROL ACT):** all components are listed on the TSCA Inventory

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** None. However, this product contains various ethylene glycols and glycol ethers which are each included as a broad category on the CERCLA Hazardous Substances list.

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**311/312 HAZARD CATEGORIES:**

**Immediate Hazard:** yes / no

**Delayed Hazard:** yes / no

**Fire Hazard:** yes / no

**Pressure Hazard:** yes / no

**Reactivity Hazard:** yes / no

**313 REPORTABLE INGREDIENTS:** The following components are subject to reporting levels established by SARA Title III, Section 313:

2-(2-Ethoxyethoxy) ethanol

CAS Number: 111-90-0

2-(2-methoxyethoxy) ethanol

CAS Number: 111-77-3

2-(2-Butoxyethoxy) ethanol

CAS Number: 112-34-5

**CLEAN WATER ACT (CWA):** None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**CLEAN AIR ACT (CAA):** None of the chemicals in the product are listed as Hazardous Air Pollutants.

**STATE REGULATIONS:**

**California:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Massachusetts:**

2-(2-Methoxyethoxy) ethanol CAS Number: 111-77-3

**New Jersey:**

Triethylene glycol monobutyl ether CAS Number: 143-22-6  
Polyethylene glycol CAS Number: 25322-68-3  
2-(2-Butoxyethoxy) ethanol CAS Number: 112-34-5  
Diethylene glycol CAS Number: 111-46-6  
2-(2-Methoxyethoxy) ethanol CAS Number: 111-77-3  
2-(2-Ethoxyethoxy) ethanol CAS Number: 111-90-0

**Pennsylvania:**

Triethylene glycol monobutyl ether CAS Number: 143-22-6  
Polyethylene glycol CAS Number: 25322-68-3  
2-(2-Butoxyethoxy) ethanol CAS Number: 112-34-5  
Diethylene glycol CAS Number: 111-46-6  
2-(2-Methoxyethoxy) ethanol CAS Number: 111-77-3  
2-(2-Ethoxyethoxy) ethanol CAS Number: 111-90-0

**INTERNAL REGULATIONS:**

**Persistent Organic Pollutants (United Nations):** not listed  
**Initial List of Prior Informed Consent Chemicals (United Nations):** not listed  
**Ozone Depleting Substances (Montreal Protocol):** not listed  
**Greenhouse Gases (Intergovernmental Panel on Climate Change):** not listed

**AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES:** All components are listed.

**CANADA: DOMESTIC SUBSTANCES LIST:** All components are listed.

**CANADA WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS):**  
D2B - Toxic Material at >1%.

**CANADIAN ENVIRONMENTAL PROTECTION AGENCY TOXICS LIST:** None of the components of this mixture are listed.

**EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES:** This material contains components not listed on the EINECS Inventory: Polyalkylene glycols, CAS Number 9038-95-3.

**NEW ZEALAND:** All components are listed.

**PHILLIPPINE INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES:** All components are listed.

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**SECTION 16: REGULATORY INFORMATION**

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**Disclaimer: This product is FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH CHILDREN AND ANIMALS. DO NOT TAKE INTERNALLY.**

Warren Unilube, Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. No warranty of fitness for any particular purpose, warranty of merchantability, or any other warranty expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specific product designated and may not be valid where such products is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and of the information referred to herein are beyond the control of Warren Unilube, Warren Unilube expressly disclaims any and all liability as to any results obtained or arising from any of the product or reliance on such information.

For additional product information, please contact Warren Unilube, Inc. at (800) 428-9284.

# SAFETY DATA SHEET

## Easy Going -50 RV Antifreeze

1. Identification

1

1.1 Product name: Easy Going -50 RV Antifreeze

2

2.1 Supplier: **Easy Going**

2.2 Product code: **EG-50**

2.3 Revision: **1.0**

2.4 Date: **01/15/2023**

3.1 Hazardous ingredients: **None**

3.2 Hazardous ingredients: **None**

3.3 Hazardous ingredients: **None**

3.4 Hazardous ingredients: **None**

2. Hazard Identification

1

2.1 Hazard statements: **None**

2

2.2 Precautionary statements: **None**

3

3.1 Environmental: **None**

4.1 GHS pictograms: **None**

4.2 Signal words: **None**

5

5.1 Hazard pictograms: **None**

5.2 Hazard pictograms: **None**

5.3 Hazard pictograms: **None**

5.4 Hazard pictograms: **None**

5.5 Hazard pictograms: **None**

5.6 Hazard pictograms: **None**

5.7 Hazard pictograms: **None**

5.8 Hazard pictograms: **None**

5.9 Hazard pictograms: **None**

5.10 Hazard pictograms: **None**

5.11 Hazard pictograms: **None**

5.12 Hazard pictograms: **None**

6

6.1 Environmental: **None**

6.2 Environmental: **None**

6.3 Environmental: **None**

6.4 Environmental: **None**

6.5 Environmental: **None**

6.6 Environmental: **None**

6.7 Environmental: **None**

6.8 Environmental: **None**

6.9 Environmental: **None**

6.10 Environmental: **None**

6.11 Environmental: **None**

6.12 Environmental: **None**

6.13 Environmental: **None**

6.14 Environmental: **None**

7





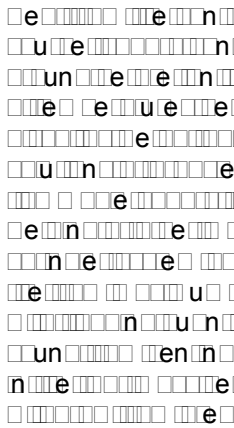
# SAFETY DATA SHEET

## Easy Going -50 RV Antifreeze

### 1.1. Identifying information

1.1.1. Product name: Easy Going -50 RV Antifreeze

### 1.2. Hazard identification

1.2.1. GHS hazard pictograms: 

1.2.2. Signal word: DANGER

1.2.3. Hazard statements: H314 Causes severe skin burns and eye damage. H335 May irritate the respiratory system. H411 Toxic to aquatic life.

1.2.4. Precautionary statements: P273 Avoid release into the environment. P303+P361+P353 In case of contact with skin, wash thoroughly with plenty of water. P305+P351+P338 In case of contact with eyes, rinse abundantly with water for several minutes. P501 Dispose of contents and container according to local, national, and international regulations.

1.3.

### 1.4. Other information

1.4.1. Other information: This product is not flammable.

1.5.

### 2.1. Hazardous ingredients

2.2.

### 2.3. Other information

2.3.1. Other information: This product is a mixture of ethylene glycol and propylene glycol. It is non-flammable and non-toxic. It is safe for use in RVs and other vehicles. It is also safe for use in lawnmowers and other outdoor equipment.

### 2.4. Other information

2.4.1. Other information: This product is not flammable. It is safe for use in RVs and other vehicles. It is also safe for use in lawnmowers and other outdoor equipment.

### 2.5. Other information

2.5.1. Other information: This product is not flammable. It is safe for use in RVs and other vehicles. It is also safe for use in lawnmowers and other outdoor equipment.

### 2.6. Other information

2.6.1. Other information: This product is not flammable. It is safe for use in RVs and other vehicles. It is also safe for use in lawnmowers and other outdoor equipment.

2.7.

### 3.1. Environmental information

3.2.

### 3.3. Other information

3.3.1. Other information: This product is not flammable. It is safe for use in RVs and other vehicles. It is also safe for use in lawnmowers and other outdoor equipment.

### 3.4. Other information

3.4.1. Other information: This product is not flammable. It is safe for use in RVs and other vehicles. It is also safe for use in lawnmowers and other outdoor equipment.

3.5.

# SAFETY DATA SHEET

## Easy Going -50 RV Antifreeze

1. IDENTIFICATION

1

1.1 Product name

Easy Going -50 RV Antifreeze  
Easy Going -50 RV Antifreeze

2

2.1 Hazard statements

3

3.1 Pictograms

None

3.2 Signal words

None

3.3 Hazard statements

None

4

4.1 GHS Precedence

None

5

2. HAZARD IDENTIFICATION

6

6.1 Hazard classification

6.2

6.3

6.4

6.5

6.6

6.7

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6.12

6.13

6.14

6.15

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6.17

6.18

6.19

None

7

8

9

10

# SAFETY DATA SHEET

## Easy Going -50 RV Antifreeze

### 1. Identification

1

1.1 Product Name

Easy Going -50 RV Antifreeze

1.2 Supplier Name

Easy Going RV Antifreeze

1.3 Manufacturer Name

Easy Going RV Antifreeze

1.4 Product Code

Easy Going RV Antifreeze

1.5 Product Weight

1.5 L

2

### 2. Hazard Identification

2

2.1 GHS Classification

2.1.1 Hazard Statements  
H314 Causes severe skin burns and eye damage.

2.2

2.3 Pictogram

Corrosive

2.4

2.5 Precautionary Statements

2.5.1 Prevention  
P273 Avoid contact with skin.

2.5.2 Response  
P303+361+353 In case of contact with skin, wash thoroughly with plenty of water. Remove contaminated clothing and shoes.

2.6

2.6.1 Hazardous to the Environment  
H411 Toxic to aquatic life with long lasting effects.

2.6.2 Hazardous to the Environment  
H412 Harmful to aquatic life.

2.7

2.7.1 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.8

2.8.1 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.9

2.9.1 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.9.2 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.9.3 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.9.4 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.9.5 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.10

2.10.1 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.10.2 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.11

2.11.1 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.11.2 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.12

2.12.1 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.13

2.13.1 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.13.2 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

2.13.3 Environmental Precautionary Statements  
P501 Dispose of contents and container to an approved disposal facility.

# SAFETY DATA SHEET

## Easy Going -50 RV Antifreeze

Section 1: Identification

Product Name: Easy Going -50 RV Antifreeze

Manufacturer: Easy Going

Supplier: Easy Going

Section 2: Hazard Identification

Hazard Statement: H314

Pictogram: C

Section 3: Composition/Information on Ingredients

Section 4: First Aid Measures

Section 5: Fire Fighting Measures

Section 6: Accidental Release Measures

Section 7: Handling and Storage

Section 8: Exposure Controls/Personal Protection

Section 9: Physical and Chemical Properties

Section 10: Stability and Reactivity

Section 11: Toxicological Information

Section 12: Ecological Information

Section 13: Disposal Considerations

Section 14: Transport Information

Section 15: Regulatory Information

Section 16: Other Information

**Refer to Current IMDG regulations for full shipping description requirements**

**This material is not prepared or packaged for air transportation**

**International shipping requirements must be determined by the party offering the material for transportation**

# SAFETY DATA SHEET

## Easy Going -50 RV Antifreeze

### 1. Identifying information

1.1

#### 1.1.1 Product name

1.1.1.1 Easy Going -50 RV Antifreeze

1.1.1.2 Easy Going -50 RV Antifreeze

1.1.1.3 Easy Going -50 RV Antifreeze

1.1.1.4 Easy Going -50 RV Antifreeze

1.1.1.5 Easy Going -50 RV Antifreeze

1.1.1.6 Easy Going -50 RV Antifreeze

1.1.1.7 Easy Going -50 RV Antifreeze

1.1.1.8 Easy Going -50 RV Antifreeze

1.1.1.9 Easy Going -50 RV Antifreeze

1.1.1.10 Easy Going -50 RV Antifreeze

1.1.1.11 Easy Going -50 RV Antifreeze

1.1.1.12 Easy Going -50 RV Antifreeze

1.1.1.13 Easy Going -50 RV Antifreeze

1.2

#### 1.2.1 Supplier information

1.2.1.1 Easy Going -50 RV Antifreeze

1.2.1.2 Easy Going -50 RV Antifreeze

1.2.1.3 Easy Going -50 RV Antifreeze

1.2.1.4 Easy Going -50 RV Antifreeze

1.2.1.5 Easy Going -50 RV Antifreeze

1.2.1.6 Easy Going -50 RV Antifreeze

1.2.1.7 Easy Going -50 RV Antifreeze

1.2.1.8 Easy Going -50 RV Antifreeze

1.2.1.9 Easy Going -50 RV Antifreeze

1.2.1.10 Easy Going -50 RV Antifreeze

1.2.1.11 Easy Going -50 RV Antifreeze

1.2.1.12 Easy Going -50 RV Antifreeze

1.2.1.13 Easy Going -50 RV Antifreeze

1.2.1.14 Easy Going -50 RV Antifreeze

1.2.1.15 Easy Going -50 RV Antifreeze

1.2.1.16 Easy Going -50 RV Antifreeze

1.2.1.17 Easy Going -50 RV Antifreeze

1.2.1.18 Easy Going -50 RV Antifreeze

1.2.1.19 Easy Going -50 RV Antifreeze

1.2.1.20 Easy Going -50 RV Antifreeze

1.2.1.21 Easy Going -50 RV Antifreeze

1.2.1.22 Easy Going -50 RV Antifreeze

1.2.1.23 Easy Going -50 RV Antifreeze

1.2.1.24 Easy Going -50 RV Antifreeze

1.2.1.25 Easy Going -50 RV Antifreeze

1.2.1.26 Easy Going -50 RV Antifreeze

1.2.1.27 Easy Going -50 RV Antifreeze

1.2.1.28 Easy Going -50 RV Antifreeze

1.2.1.29 Easy Going -50 RV Antifreeze

1.2.1.30 Easy Going -50 RV Antifreeze

1.2.1.31 Easy Going -50 RV Antifreeze

1.2.1.32

1.2.1.33

1.2.1.34

# SAFETY DATA SHEET

## Easy Going -50 RV Antifreeze

**1. IDENTIFICATION**

**1.1 Product Name:** Easy Going -50 RV Antifreeze

**1.2 Supplier:** [Supplier Name]

**1.3 Product Code:** [Product Code]

**1.4 Revision:** [Revision]

**2. HAZARD IDENTIFICATION**

**2.1 GHS Classification:** [Classification]

**2.2 Signal Word:** [Signal Word]

**2.3 Hazard Statements:** [Hazard Statements]

**2.4 Precautionary Statements:** [Precautionary Statements]

**3. COMPOSITION AND INFORMATION ON INGREDIENTS**

**3.1 Chemical Name:** [Chemical Name]

**3.2 CAS Number:** [CAS Number]

**3.3 Molecular Weight:** [Molecular Weight]

**3.4 Other Information:** [Other Information]

**4. FIRST AID MEASURES**

**4.1 Ingestion:** [First Aid Measures]

**4.2 Inhalation:** [First Aid Measures]

**4.3 Skin Contact:** [First Aid Measures]

**4.4 Eye Contact:** [First Aid Measures]

**5. FIRE FIGHTING MEASURES**

**5.1 Flammability:** [Flammability]

**5.2 Flash Point:** [Flash Point]

**5.3 Self-Heating:** [Self-Heating]

**5.4 Oxidizing:** [Oxidizing]

**5.5 Decomposition Temperature:** [Decomposition Temperature]

**5.6 Fire Fighting Media:** [Fire Fighting Media]

**5.7 Fire Fighting Precautions:** [Fire Fighting Precautions]

**5.8 Fire Fighting Equipment:** [Fire Fighting Equipment]

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Spill/Leak Procedures:** [Spill/Leak Procedures]

**6.2 Environmental Precautions:** [Environmental Precautions]

**6.3 Personal Protection:** [Personal Protection]

**7. HANDLING AND STORAGE**

**7.1 Handling Precautions:** [Handling Precautions]

**7.2 Storage Conditions:** [Storage Conditions]

**7.3 Shelf Life:** [Shelf Life]

**7.4 Compatibility:** [Compatibility]

**8. TRANSPORT INFORMATION**

**8.1 UN Number:** [UN Number]

**8.2 Proper Shipping Name:** [Proper Shipping Name]

**8.3 Hazard Class/Division:** [Hazard Class/Division]

**8.4 Packing Group:** [Packing Group]

**8.5 Transport Labels:** [Transport Labels]

**8.6 Special Provisions:** [Special Provisions]

**9. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**9.1 Occupational Exposure Limits (OELs):** [OELs]

**9.2 Engineering Controls:** [Engineering Controls]

**9.3 Personal Protective Equipment (PPE):** [PPE]

**10. PHYSICAL AND CHEMICAL PROPERTIES**

**10.1 Appearance:** [Appearance]

**10.2 Odor:** [Odor]

**10.3 Color:** [Color]

**10.4 Melting Point:** [Melting Point]

**10.5 Boiling Point:** [Boiling Point]

**10.6 Density:** [Density]

**10.7 Vapor Pressure:** [Vapor Pressure]

**10.8 Solubility:** [Solubility]

**10.9 pH:** [pH]

**10.10 Other Properties:** [Other Properties]

**11. TOXICOLOGICAL INFORMATION**

**11.1 Acute Toxicity:** [Acute Toxicity]

**11.2 Chronic Toxicity:** [Chronic Toxicity]

**11.3 Carcinogenicity:** [Carcinogenicity]

**11.4 Mutagenicity:** [Mutagenicity]

**11.5 Reproductive Toxicity:** [Reproductive Toxicity]

**11.6 Other Toxicological Data:** [Other Toxicological Data]

**12. ECOLOGICAL INFORMATION**

**12.1 Biodegradability:** [Biodegradability]

**12.2 Persistence and Bioaccumulation:** [Persistence and Bioaccumulation]

**12.3 Ecotoxicity:** [Ecotoxicity]

**12.4 Other Ecological Data:** [Other Ecological Data]

**13. DISPOSAL CONSIDERATIONS**

**13.1 Waste Management:** [Waste Management]

**13.2 Environmental Precautions:** [Environmental Precautions]

**13.3 Other Disposal Information:** [Other Disposal Information]

**14. TRANSPORT AND STORAGE INFORMATION**

**14.1 UN Number:** [UN Number]

**14.2 Proper Shipping Name:** [Proper Shipping Name]

**14.3 Hazard Class/Division:** [Hazard Class/Division]

**14.4 Packing Group:** [Packing Group]

**14.5 Transport Labels:** [Transport Labels]

**14.6 Special Provisions:** [Special Provisions]

**15. REGULATORY INFORMATION**

**15.1 REACH:** [REACH]

**15.2 TSCA:** [TSCA]

**15.3 Other Regulations:** [Other Regulations]

**16. OTHER INFORMATION**

**16.1 Safety Data Sheet (SDS) Version:** [SDS Version]

**16.2 Date of Revision:** [Date of Revision]

**16.3 Other Information:** [Other Information]

# SAFETY DATA SHEET- ECHO BAR & CHAIN OIL

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Spectrum  
CORPORATION



## 1. IDENTIFICATION

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### 1.1. PRODUCT IDENTIFIER USED ON LABEL:

Finished Product Item Number	Customer Item Number	LABEL DESCRIPTION ACTUAL	BRAND
BC3104EC	6459007	ECHO BAR & CHAIN OIL	ECHO
BC3112EC	99988800083	ECHO BAR & CHAIN OIL	ECHO

### 1.2. RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE;

1.2.1. PETROLEUM LUBRICATING OIL

1.2.2. NO OTHER USES RECOMMENDED

### 1.3. NAME, ADDRESS, AND TELEPHONE NUMBER OF THE CHEMICAL MANUFACTURE R, IMPORTER, OR OTHER RESPONSIBLE PARTY:

1.3.1.

#### **Spectrum Lubricants Corporation**

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500 Industrial Park Drive  
Selmer, TN 38375-3276  
United States of America

#### **Product Information**

MSDS Requests: (800) 264-6457 or +17316454972

Technical Information: (800) 264-6457 or +17316454972

General Information: [vswedley@spectrumcorporation.com](mailto:vswedley@spectrumcorporation.com)

### 1.4. EMERGENCY PHONE NUMBER:

1.4.1.

#### **Emergency Response**

North America: CHEMTREC (800) 424-9300 after 5:00pm CST Or +17035273887

#### **Health Emergency**

USA: (800) 264-6457 or +17316454972



# SAFETY DATA SHEET- ECHO BAR & CHAIN OIL

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## 2. HAZARD(S) IDENTIFICATION

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### 2.1. CLASSIFICATION OF THE CHEMICAL IN ACCORDANCE WITH PARAGRAPH (d) of §1910.1200:

2.1.1. Acute Inhalation Category 4

### 2.2. Signal Word:

2.2.1. Warning

### 2.3. Symbol:



### 2.4. Hazard Statements:

2.4.1. Harmful if Inhaled

### 2.5. Precautionary Statements:

#### 2.5.1. Prevention:

2.5.1.1. Avoid breathing dust/fume/gas/mist/vapors/spray.

2.5.1.2. Use only outdoors or in a well-ventilated area.

#### 2.5.2. Response:

2.5.2.1. If inhaled: Remove person to fresh air and keep comfortable for breathing.

2.5.2.2. Call a poison center/doctor if you feel unwell.

## 3. Composition/ information on ingredients

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### 3.1. The chemical name and concentration (exact percentage) or concentration ranges of all ingredients which are classified as health hazards in accordance with paragraph (d) of §1910.1200

3.1.1.

COMPONENTS	CAS Number	EU Number	Concentration (%)
Petroleum distillates, hydrotreated heavy naphthenic	64742-52-5	265-155-0	75-95
Residual Oils, hydrotreated (petroleum)	64742-57-0	265-160-8	5-25

## 4. FIRST AID MEASURES

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4.1.

<b>Skin:</b>	Wash skin with soap and warm water. Wash clothing before re-use.
<b>Eye:</b>	If splashed into eyes flush eyes with clear water for five (5) minutes.

# SAFETY DATA SHEET- ECHO BAR & CHAIN OIL

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<b>Inhalation:</b>	Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell
<b>Ingestion:</b>	If ingested, do not induce vomiting. Call a physician.

## 5. FIRE FIGHTING MEASURES

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5.1. **Flash Point:** 425°F (218.3°C)

5.2. **Protective Equipment/Fire Fighting Instructions:**

5.2.1. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

5.3. **Extinguishing Media:**

5.3.1. Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

5.4. **Special Firefighting Procedures:**

5.4.1. Cool exposed containers with water spray.

5.5. **Unusual Fire and Explosion Hazards:**

5.5.1. Pressure increase in over heated closed containers. Cool containers with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

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6.1. **Spill Procedures:**

6.1.1. Remove ignition sources. Recover Liquid. Add absorbent to spill area. Ventilate confined spaces. Advise authorities if product enters sewers, etc.

6.2. **Waste Disposal:**

6.2.1. Assure conformity with applicable disposal regulations. Dispose of absorbed material at approved waste site

6.3. **Precautionary Measures:**

6.3.1. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling.

6.3.2. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

## 7. HANDLING AND STORAGE

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7.1. **HANDLING**

7.1.1. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers

# SAFETY DATA SHEET- ECHO BAR & CHAIN OIL

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should be completely drained, properly closed, and promptly returned to a drum re-conditioner or disposed of properly.

## 7.2. STORAGE

7.2.1. Keep container closed when not in use. Do not store with strong oxidizing agents. Do not store at elevated temperatures.

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

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### 8.1. Component Exposure Limits:

8.1.1. Petroleum distillates, hydrotreated heavy naphthenic

8.1.1.1. ACGIH TLV: 5mg/m<sup>3</sup> (oil mist) TWA

8.1.1.2. OSHA PEL: 5mg/m<sup>3</sup> (oil mist) TWA

8.1.2. Residual oils, hydrotreated (petroleum)

8.1.2.1. ACGIH TLV: 5mg/m<sup>3</sup> (oil mist) TWA

8.1.2.2. OSHA PEL: 5mg/m<sup>3</sup> (oil mist) TWA

### 8.2. Engineering Controls:

8.2.1. Ventilate as needed to comply with exposure limit

### 8.3. Eye Protection:

8.3.1. Use goggles/face shield to avoid eye contact

### 8.4. Glove Protection:

8.4.1. Use impervious gloves to avoid repeated/prolonged skin contact.

### 8.5. Work/Hygienic Practices:

8.5.1. If clothing becomes contaminated, change to fresh clean clothing. Do not wear until thoroughly laundered.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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9.1. Appearance/Odor:	Amber colored liquid with mild hydrocarbon odor.	9.2. Odor Threshold:	No data available
9.3. pH:	No data available	9.4. Boiling Point:	Wide range
9.5. Melting Point:	No data available	9.6. Solubility (H <sub>2</sub> O):	Negligible
9.7. Specific Gravity:	0.9194 @ 15.6°C	9.8. Density:	7.622 lbs/gal
9.9. Octanol/H <sub>2</sub> O Coeff.:	No data available	9.10. Evaporation Rate (BUAC=1):	<1

# SAFETY DATA SHEET- ECHO BAR & CHAIN OIL

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9.11. <b>Molecular Weight:</b>	No data available	9.12. <b>Decomposition Temp:</b>	No data available
9.13. <b>Auto Ignition:</b>	No data available	9.14. <b>Lower Flammability Limit:</b>	No data available
9.15. <b>Flash Point:</b>	425°F	9.16. <b>Upper Flammability Limit:</b>	No data available
9.17. <b>Vapor Density (Air=1):</b>	>1	9.18. <b>Vapor Pressure:</b>	<1mmHg @ 20°C
9.19. <b>VOC:</b>	Nil	9.20. <b>Flammability Class:</b>	Not classified
9.21. <b>Viscosity @ 40°C</b>	146cSt (146 mm <sup>2</sup> /s)	9.22. <b>Viscosity @ 100°C</b>	10.3cSt (10.3 mm <sup>2</sup> /s)

## 10. STABILITY AND REACTIVITY

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### 10.1. **Reactivity:**

10.1.1. **Material does not pose a significant reactivity hazard.**

### 10.2. **Chemical Stability:**

10.2.1. **Stable**

### 10.3. **Incompatibility/Conditions to avoid:**

10.3.1. **Avoid strong oxidants**

### 10.4. **Possibility of Hazardous Reactions:**

10.4.1. **Will not undergo hazardous polymerization.**

### 10.5. **Hazardous Decomposition Products:**

10.5.1. **Partial burning produces fumes, smoke and carbon monoxide**

## 11. TOXICOLOGY INFORMATION

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### 11.1. **Likely Routes of Exposure:**

11.1.1. **Ingestion, Inhalation, Eye contact, Skin contact.**

### 11.2. **Acute Effects:**

11.2.1. **Inhalation: Harmful if inhaled. May cause respiratory irritation.**

11.2.2. **Eye Contact: Expected to be minimal/no eye irritation.**

11.2.3. **Skin Contact: Expected to be minimal/no skin irritation.**

11.2.4. **Ingestion: Expected to be low ingestion hazard.**

### 11.3. **Component Data/ Analysis**

11.3.1. **Petroleum distillates, hydrotreated heavy naphthenic:**

11.3.1.1. **Oral (LD50) (Rat): Acute: >5000 mg/kg**

11.3.1.2. **Inhalation (LC50) (Rat): Acute: 2.18 mg/l (4hr)**

11.3.1.3. **Dermal (LD50) (Rabbit): >2000 mg/kg**

### 11.4. **Sensitization:**

11.4.1. **Based on best current information, there are no known human effects.**

### 11.5. **Carcinogenicity:**

11.5.1. **There is no known information on carcinogenic components.**



# SAFETY DATA SHEET- ECHO BAR & CHAIN OIL

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15.2.1. No components were identified.

## 15.3. SARA 311/312 Hazard Identification

15.3.1. Acute (Immediate) Health Hazard

## 15.4. SARA 313 Toxic Chemical Notification and Release Reporting

15.4.1. No components were identified.

## 15.5. CERCLA

15.5.1. No components were identified.

## 15.6. Clean Water Act (CWA)

15.6.1. This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

## 15.7. California Proposition 65:

15.7.1. No components identified.

## 15.8. New Jersey Right-to-Know Label

15.8.1. Petroleum Oil

## 15.9. WHMIS HAZARD SYMBOL AND CLASSIFICATION

15.9.1. NOT CLASSIFIED.

# 16. OTHER INFORMATION

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16.1.

HAZARD RANKINGS			
HMIS		NFPA	
HEALTH HAZARD	1	HEALTH HAZARD	1
FIRE HAZARD	1	FIRE HAZARD	1
PHYSICAL HAZARD	0	INSTABILITY/REACTIVITY	0
PERSONAL PROTECTION	B		

16.2. Date of preparation: 10/28/2013

## 16.3. MANUFACTURER DISCLAIMER:

16.3.1. *The data presented herein is based upon tests and information, which we believe to be reliable. However, users should make their own investigations to determine the suitability of the information for their particular purpose*



# NAPA Extended Life Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : NAPA Extended Life Concentrate Antifreeze & Coolant

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Antifreeze & Coolant

#### 1.3. Details of the supplier of the safety data sheet

Old World Industries, LLC  
4065 Commercial Ave.  
Northbrook, IL 60062 - USA  
T (847) 559-2000  
[www.oldworldind.com](http://www.oldworldind.com)

#### 1.4. Emergency telephone number

Emergency number : (800) 424-9300; (703) 527 3887 (International)  
Chemtrec

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Acute Tox. 4 (Oral) H302  
Repr. 2 H361  
STOT RE 2 H373

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H302 - Harmful if swallowed  
H361 - Suspected of damaging fertility or the unborn child  
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral)

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P260 - Do not breathe mist, spray, vapors  
P264 - Wash affected areas thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P280 - Wear personal protective equipment as required  
P301+P310 - If swallowed: Immediately call doctor/physician or poison center  
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P308+P313 - If exposed or concerned: Get medical advice/attention  
P405 - Store locked up  
P501 - Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

# NAPA Extended Life Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	% by wt	GHS-US classification
ethylene glycol	(CAS No) 107-21-1	90 - 97	Acute Tox. 4 (Oral), H302
diethylene glycol	(CAS No) 111-46-6	< 5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
water	(CAS No) 7732-18-5	< 4	Not classified
potassium 2-ethylhexanoate	(CAS No) 3164-85-0	< 3	Repr. 2, H361
denatonium benzoate	(CAS No) 3734-33-6	30 - 50 ppm	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical advice. Allow the victim to rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- First-aid measures after skin contact : Remove contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Rinse immediately with plenty of water (for at least 15 minutes). Get medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water for 15 minutes, lifting lower and upper lids. If eye irritation persists: Rinse immediately with plenty of water. Get medical advice/attention.
- First-aid measures after ingestion : Obtain emergency medical attention. Rinse mouth. If the person is fully conscious, make him/her drink two glasses of water. Never give an unconscious person anything to drink. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell. If medical advice is delayed, and if the person has swallowed a moderate volume of material (a few ounces), then give three to four ounces of hard liquor, such as whiskey. For children, give proportionally less liquor, according to weight.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes damage to organs (kidneys) Oral. Suspected of damaging fertility or the unborn child.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye damage.
- Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100 mL (3 oz).

#### 4.3. Indication of any immediate medical attention and special treatment needed

A more effective intravenous antidote for physician uses is 4-methylpyrazaole, a potent inhibitor of alcohol dehydrogenases, which effectively blocks the formation of toxic metabolites of ethylene glycol. It has been used to decrease the metabolic consequences of ethylene glycol poisoning before metabolic acidosis coma, seizures, and renal failure have occurred.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Fine water spray. Dry powder. Alcohol-resistant foam. Foam. Carbon dioxide. Sand. Water fog.
- Unsuitable extinguishing media : Do not use a heavy water stream. May spread fire.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.
- Reactivity : No dangerous reactions known under normal conditions of use.

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.



# NAPA Extended Life Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Special protective equipment for fire fighters : Wear positive pressure self-contained breathing apparatus (SCBA). Protective fire fighting clothing (includes fire-fighting helmet, coat, pants, boots and gloves).

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Refer to section 8.2.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use. Product may become solid at temperatures below -18 °C (0 °F). Do not cut, drill, weld, use a blowtorch on, etc. containers even when empty. Do not store near food, foodstuffs, drugs or potable water supplies.

Incompatible products : Keep away from strong acids, strong bases and oxidizing agents.

Incompatible materials : Sources of ignition.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### ethylene glycol (107-21-1)

USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	100.00 mg/m <sup>3</sup>
USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract (URT) & Eye irritant

#### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure. Gloves. Safety glasses.



Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : If exposed to levels above exposure limits wear appropriate respiratory protection.

Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

# NAPA Extended Life Concentrate Antifreeze & Coolant

## Safety Data Sheet

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Color	: Yellow;Green
Odor	: Mild
Odor threshold	: No data available
pH 50% water solution	: 8
Relative evaporation rate (butylacetate=1)	: Nil
Freezing point	: -18 °C (0 °F)
Boiling point	: 158 °C (317 °F)
Flash point	: 116 °C (241 °F) [100% Ethylene Glycol] <i>ASTM D56</i>
Auto-ignition temperature	: 400 °C (752 °F) [100% Ethylene Glycol] <i>Literature</i>
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: < 0.1 @ 20 °C
Relative vapor density at 20 °C	: No data available
Specific Gravity	: 1.12
Density	: 1.12 g/l (9.3 lbs/gal)
Solubility	: Water: Complete
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.
Explosive limits	: 3.2 - 15.3 vol %

### 9.2. Other information

VOC content : 0.00 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Extremely high or low temperatures. Keep away from any flames or sparking source.

### 10.5. Incompatible materials

Keep away from strong acids, strong bases and oxidizing agents.

### 10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Fume. alcohols. Aldehydes. Ethers.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

<b>denatonium benzoate (3734-33-6)</b>	
LD50 oral rat	584 mg/kg (Rat)
LD50 dermal rabbit	> 2,000 mg/kg (Rabbit)
ATE US (oral)	584 mg/kg bodyweight
<b>ethylene glycol (107-21-1)</b>	
LD50 oral rat	> 5,000 mg/kg (Rat)
ATE US (oral)	500 mg/kg bodyweight

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<b>diethylene glycol (111-46-6)</b>	
LD50 oral rat	12,565 mg/kg (Rat)
LD50 dermal rabbit	11,890 mg/kg (Rabbit)
ATE US (oral)	500 mg/kg bodyweight
ATE US (dermal)	11,890 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100 mL (3 oz).

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>denatonium benzoate (3734-33-6)</b>	
LC50 fish 1	> 1,000 mg/l 96 h; <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> )
EC50 Daphnia 1	13 mg/l (48 h; <i>Daphnia magna</i> )
<b>ethylene glycol (107-21-1)</b>	
LC50 fish 1	53,000 mg/l (96 h; <i>Pimephales promelas</i> ; Static system)
EC50 Daphnia 1	> 10,000 mg/l (24 h; <i>Daphnia magna</i> )
LC50 fish 2	40,761 mg/l (96 h; <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> ); Static system)
Threshold limit algae 1	> 10,000 mg/l (168 h; <i>Scenedesmus quadricauda</i> )
Threshold limit algae 2	2,000 mg/l (192 h; <i>Microcystis aeruginosa</i> )
<b>diethylene glycol (111-46-6)</b>	
LC50 fish 1	> 5,000 ppm (24 h; <i>Carassius auratus</i> )
LC50 other aquatic organisms 1	1,174 mg/l ( <i>Xenopus laevis</i> )
EC50 Daphnia 1	> 10,000 mg/l (24 h; <i>Daphnia magna</i> )
LC50 fish 2	61,072 ppm (168 h; <i>Poecilia reticulata</i> )
TLM fish 1	> 32,000 mg/l (96 h; <i>Gambusia affinis</i> )
TLM other aquatic organisms 1	> 1,000 ppm (96 h)
Threshold limit other aquatic organisms 1	1,174 mg/l (72 h; <i>Xenopus laevis</i> ; Toxicity test)
Threshold limit other aquatic organisms 2	10,745 mg/l (16 h; Protozoa; Toxicity test)
Threshold limit algae 1	2,700 mg/l (168 h; <i>Scenedesmus quadricauda</i> )
Threshold limit algae 2	100 mg/l ( <i>Selenastrum capricornutum</i> )

### 12.2. Persistence and degradability

<b>denatonium benzoate (3734-33-6)</b>	
Persistence and degradability	Biodegradability in water: no data available. No (test) data on mobility of the substance available.
<b>ethylene glycol (107-21-1)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.47 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.24 g O <sub>2</sub> /g substance
ThOD	1.29 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.36 % ThOD

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<b>diethylene glycol (111-46-6)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	0.02 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.51 g O <sub>2</sub> /g substance
ThOD	1.51 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.015 % ThOD

### 12.3. Bioaccumulative potential

<b>denatonium benzoate (3734-33-6)</b>	
Log Pow	1.78 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

<b>ethylene glycol (107-21-1)</b>	
BCF fish 1	10 (72 h; Leuciscus idus)
BCF other aquatic organisms 1	0.21 - 0.6 (Procambarus sp.; Chronic)
BCF other aquatic organisms 2	190 (24 h; Algae)
Log Pow	-1.34 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

<b>diethylene glycol (111-46-6)</b>	
Log Pow	-1.98
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

<b>ethylene glycol (107-21-1)</b>	
Surface tension	0.048 N/m (20 °C / 68 °F)

<b>diethylene glycol (111-46-6)</b>	
Surface tension	0.0485 N/m

### 12.5. Other adverse effects

Effect on ozone layer	: No known effect on the ozone layer
Effect on global warming	: No known ecological damage caused by this product.
Effect on global warming	: No additional information available
Other information	: Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT	
Transport document description	: UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III
UN-No.(DOT)	: 3082
DOT NA no.	: UN3082
Proper Shipping Name (DOT)	: Environmentally hazardous substances, liquid, n.o.s.
Department of Transportation (DOT) Hazard Classes	: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Hazard labels (DOT)	: 9 - Class 9 (Miscellaneous dangerous materials)



DOT Symbols	: G - Identifies PSN requiring a technical name
Packing group (DOT)	: III - Minor Danger
DOT Packaging Exceptions (49 CFR 173.xxx)	: 155

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DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: No limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: No limit
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Other information	: Non Bulk: Not regulated by the US D.O.T. (in quantities under 5,000 lbs in any one inner package).

### ADR

No additional information available

### Transport by sea

Proper Shipping Name (IMDG) : Not regulated by IMDG (in quantities under 5,000 lbs in any one inner package)

### Air transport

Proper Shipping Name (IATA) : Not regulated by IATA (in quantities under 5,000 lbs in any one inner package)

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<b>NAPA Extended Life Concentrate Antifreeze &amp; Coolant</b>	
EPA TSCA Regulatory Flag	Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed
<b>denatonium benzoate (3734-33-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>ethylene glycol (107-21-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb(s)
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Ethylene glycol is subject to Tier I and/or Tier II annual inventory reporting.
SARA Section 313 - Emission Reporting	Ethylene glycol is subject to Form R Reporting requirements.
<b>diethylene glycol (111-46-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>potassium 2-ethylhexanoate (3164-85-0)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### 15.2. International regulations

#### CANADA

<b>NAPA Extended Life Concentrate Antifreeze &amp; Coolant</b>	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

#### WHMIS Classification



Class D Division 2  
Subdivision A - Very  
toxic material  
causing other toxic  
effects

#### EU-Regulations

No additional information available

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Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

### 15.2.2. National regulations

#### NAPA Extended Life Concentrate Antifreeze & Coolant

DSL (Canada): The intentional ingredients of this product are listed  
ECL (South Korea): The intentional ingredients of this product are listed.  
EINECS (Europe): The intentional ingredients of this product are listed  
ENCS (Japan): The intentional ingredients of this product are listed

### 15.3. US State regulations

#### ethylene glycol (107-21-1)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

#### diethylene glycol (111-46-6)

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

## SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure

NFPA health hazard

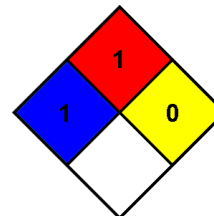
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard

Physical : 0 Minimal Hazard

Personal Protection : B

SDS GHS US (GHS HazCom 2012) OWI

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# NAPA Extended Life Concentrate Antifreeze & Coolant

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# SAFETY DATA SHEET

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## Freeze Ban -50

### Section 1- Chemical Product and Company Identification

**Product Name:** Freeze Ban -50

**Supplier:** Camco Manufacturing, Inc.  
121 Landmark Drive  
Greensboro, NC 27409  
1-800-334-2004

**Product Use:** RV and Marine Antifreeze

**Product Code:** 30767 (1 Gallon), 30769 (5 Gallons) and 30768 (55 Gallon Drum)

**Date of Preparation/Revision:** May 13, 2013

**In case of Emergency:** 1-800-535-5053

### Section 2- Hazards identification

#### Emergency Overview



Irritant

**WARNING!** This product is irritating to the eyes, respiratory system and skin. This product is an aqueous solution which will not burn. This material is NOT HAZARDOUS by OSHA Hazard Communication definition. Slightly combustible liquid. Do not handle near heat, sparks, or open flame. May cause minor eye irritation. High aerosol concentrations may cause mild irritation of the nose and throat as well as central nervous system depression. Not expected to cause skin irritation. Not expected to be a sensitizer.

#### **Potential Health Effects: Eyes**

Contact with the eyes can cause moderate irritation. Symptoms may include discomfort or pain and redness. Severe over exposure can result in swelling of the conjunctiva along with tissue damage which may lead to blindness.

#### **Potential Health Effects: Skin**

This product is irritating to the skin. Depending on the duration of contact, symptoms will include reddening, discomfort, irritation, and possible tissue damage. Repeated contact with this material may produce dermatitis.

#### **Potential Health Effects: Ingestion**

Ingestion of high doses may cause discomfort and irritation of the gastrointestinal tract

#### **Potential Health Effects: Inhalation**

This product is irritating to the respiratory system. Inhalation of vapors or mists of the product can cause sneezing, coughing and difficulty breathing. High aerosol concentrations may cause mild reversible irritation of the nose and throat as well as CNS depression

#### **Medical Conditions Aggravated by Exposure**

Pre-existing skin and eye conditions.

#### **HMIS Ratings: Health: 1 Fire: 1 Reactivity: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

See toxicological information (section 11)



# SAFETY DATA SHEET

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## Freeze Ban -50

### Section 3 - Composition, Information on Ingredients

<u>Name</u>	<u>CAS Number</u>	<u>% Volume</u>
Propylene Glycol	57-55-6	< 32%
Dipotassium Phosphate	7758-11-4	< 0.50%

#### **Component Related Regulatory Information**

This product is not regulated as defined by 49CFR 172.101 by the US Department of Transportation.

#### **Component Information/Information on Non-Hazardous Components**

This product is considered to be non-hazardous by 29 CFR 1910.1200

### Section 4 - First Aid Measures

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. For specific information refer to the Emergency Overview in Section 3 of this MSDS.

- Eye contact** Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.
- Skin contact** Not expected to present a significant skin hazard under anticipated conditions of normal use. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.
- Ingestion** Ingestion unlikely. If large quantity swallowed, give lukewarm water (pint/ 1/2 litre) if victim completely conscious/alert. Obtain medical attention. Never give anything by mouth to a victim who is unconscious or is having convulsions.
- Inhalation** If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If irritation persists get medical attention.

#### **Notes to Physician**

Treat symptomatically. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

### Section 5 - Fire-Fighting Measures

**FLASH POINT:** 228.2 °F (109 °C) **METHOD USED:** PMCC

**AUTO-IGNITION TEMPERATURE:** 699.8 °F (371 °C)

**FLAMMABLE LIMITS IN AIR BY VOLUME-** LOWER: ~ 2.4 vol % UPPER: ~ 17.4 vol %

#### **General Fire Hazards**

This product is an aqueous solution which will not burn. Non-Flammable

#### **Hazardous Combustion Products**

Decomposition may yield carbon monoxide compounds and other toxic gases.

#### **Extinguishing Media**

SMALL FIRE: Use dry chemicals, CO<sub>2</sub>, water spray or alcohol-resistant foam. LARGE FIRE: Use water spray, water fog or alcohol-resistant foam.

#### **Fire Fighting Equipment/Instructions**

Firefighters should wear full protective clothing including self contained breathing apparatus.

#### **Fire Fighting Guidance:**

Heat from fire can generate flammable vapor. When mixed with air and exposed to ignition source, vapors can burn in open or explode if confined. May travel long distances along the ground before igniting and flashing back to vapor sources. Fine sprays/mists may be combustible at temperatures below normal flash point. Aqueous solutions containing less than 95% propylene

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## Freeze Ban -50

glycol by weight have no flash point as obtained by standard test methods. However aqueous solutions of propylene glycol greater than 22% by weight, if heated sufficiently, will produce flammable vapors. Always drain and flush systems containing propylene glycol with water before welding or other maintenance. Refer to NFPA Code 13 for guidance in using propylene glycol in sprinkler system applications. Move containers from fire area if you can do it without risk. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

**NFPA Ratings: Health: 1 Fire: 1 Reactivity: 0 Other: none**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

### **Section 6 - Accidental release measures**

#### **Containment Procedures**

In case of accidental spill, may contaminate water supplies/pollute public waters. Evacuate/limit access. Equip responders with proper protection. Extinguish ignition sources; stop release; prevent flow to sewers or public waters. Notify fire and environmental authorities. Restrict water use for cleanup. Slippery walking/spread granular cover or soak up. Impound/recover large land spill; soak up small spill with inert solids. Use suitable disposal containers. On water, material is soluble and will disperse rapidly unless contained and collected quickly to minimize dispersion. Report per regulatory requirements.

#### **Clean-Up Procedures**

Absorb spill with inert material such as: lime, polypads, or other suitable absorbent material. Shovel the absorbed material into appropriate container for disposal.

#### **Evacuation Procedures**

Isolate area. Keep unnecessary personnel away.

#### **Special Procedures**

Isolate exposure. Wear appropriate personal protective equipment. Follow all Local, State, Federal and Provincial regulations for disposal.

### **Section 7- Handling and Storage**

#### **Handling Procedures**

Hygroscopic. Handle with care. After handling, always wash hands thoroughly with soap and water. Always drain and flush systems containing propylene glycol with water before welding or other maintenance. Wear recommended personal protective equipment. Observe precautions pertaining to confined space entry.

#### **Storage Procedures**

Hygroscopic. Keep drums tightly closed to prevent contamination. Store away from heat, sparks, open flames, strong oxidizing agents and direct sunlight. Store at 65-90°F (18-32°C). Stainless steel containers. Lined steel. Mild steel. Reinforced plastic. Use dry nitrogen or low dew point air for tank padding.

### **Section 8 - Exposure Controls / Personal Protection**

#### **Engineering Controls**

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this product.

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## Freeze Ban -50

### PERSONAL PROTECTIVE EQUIPMENT

**Personal Protective Equipment: Eyes/Face**

Wear chemical goggles and face shield.

**Personal Protective Equipment: Skin**

Wear impervious (neoprene) gloves, impervious apron.

**Personal Protective Equipment: Respiratory**

If ventilation is not sufficient to effectively prevent buildup of vapors or mists, appropriate approved NIOSH respiratory protection must be provided. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage must be implemented.

**Personal Protective Equipment: General**

Eye wash fountain and emergency showers are recommended. An emergency spill response will necessitate the use of more stringent personal protective equipment.

### Section 9 - Physical and Chemical Properties

<b>Appearance:</b>	Clear Red Liquid
<b>Odor:</b>	No Odor
<b>Physical State:</b>	Liquid
<b>pH: (@59° F / 15° C)</b>	7.5 – 9.5
<b>Vapor pressure:</b>	Not Applicable
<b>Vapor density:</b>	Not Applicable
<b>Boiling Point:</b>	>228°F (>109° C)
<b>Melting Point:</b>	Not Determined
<b>Solubility:</b>	Completely
<b>Specific Gravity: (@70° F / 21° C)</b>	1.040
<b>Burst Protection:</b>	-50° F (-45.5° C)
<b>Evaporation Rate:</b>	Similar to Water

**Physical Properties: Additional Information**

No additional information available

### Section 10 - Stability and Reactivity

**Chemical Stability**

This is a stable material.

**Chemical Stability: Conditions to Avoid**

Avoid contact with extreme heat and oxidizing agents.

**Incompatibility**

Reacts with strong oxidizing agents, strong acid and Isocyanates.

**Hazardous Decomposition**

Decomposition may yield carbon monoxide and other toxic fumes.

**Hazardous Polymerization**

Will not occur.

# SAFETY DATA SHEET

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## Freeze Ban -50

### Section 11 - Toxicological Information

#### **Product Summary**

No additional toxicology information is available for this product itself. (See Component Toxicity Information).

#### **Component Information**

**Propylene Glycol 57-55-6**

#### **Acute Toxicity - Lethal Doses**

LD50 (Oral) Rat 22,000 MG/KG BWT

LD50 (Skin) Rabbit. 20,800 MG/KG BWT

#### **Irritation**

Skin Not a skin irritant. Repeated or prolonged contact with skin may cause dermatitis.

Eye May cause minor eye irritation. Effects of eye irritation are reversible.

#### **Sensitization**

Not expected to cause sensitization by skin contact, however skin reactions of unknown etiology have been described in some hypersensitive individuals following topical application.

#### **Target Organ Effects**

Skin: Repeated or prolonged contact with skin may cause defatting and drying of the skin which may result in dermatitis.

#### **Repeated Dose Toxicity**

No adverse systemic changes were reported in rats or dogs following repeated dietary exposure to high concentrations of propylene glycol. Cats responded with species-specific hematological changes (Heinz body formation) yet all other tissues were unaffected. No systemic effects, but mild eye and nasal irritation were noted in rats following sub-chronic exposure to high concentrations of propylene glycol aerosol. Overall propylene glycol is of low inherent toxicity following repeated oral or inhalation exposure.

#### **Reproductive Effects**

No adverse effect on reproductive performance was seen in male and female mice exposed continuously to high doses of propylene glycol in drinking water for up to 3 months.

#### **Developmental Effects**

Results from studies in pregnant rats, mice, hamsters and rabbits demonstrate that propylene glycol is not teratogenic or fetotoxic.

#### **Genetic Toxicity**

Negative for genotoxicity both in vitro and in vivo tests.

#### **Carcinogenicity**

No increase in tumors was noted in rats and dogs exposed to high concentrations of propylene glycol via the diet for up to 2 years. The incidence of skin tumors was unaltered in mice following dermal application over a lifetime. Not listed by IARC, NTP, or OSHA.

#### **Other Toxicological Information**

No additional information available.

### Section 12 - Ecological Information

#### **Ecotoxicity**

##### **A: General Product Information**

This material is expected to be non-hazardous to aquatic species.

##### **B: Component Analysis - Ecotoxicity**

###### Propylene Glycol

#### **Ecotoxicity**

This material is expected to be non-hazardous to aquatic species.

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## Freeze Ban -50

### Acute toxicity to fish

LC50 / 96 HOUR fathead minnow 51,400 mg/l

LC50 / 96 HOUR salmon 51,600 mg/l

### Acute toxicity to aquatic invertebrates

EC50 / 48 HOUR Daphnia magna. 43,500 mg/l

EC50 / 48 HOUR saltwater mysid. 27,300 mg/l

### Toxicity to aquatic plants

EC50 / 72 HOUR Freshwater Algae. 24,200 mg/l

EC50 / 72 HOUR Marine algae 19,300 mg/l

### Toxicity to microorganisms

Summary: No Data Available.

### Chronic toxicity to fish

Summary: No Data Available.

### Chronic toxicity to aquatic invertebrates

IC25 / waterflea. 13,470 mg/l

Summary: A three generation reproductive study.

### Environmental Fate

No other data available for this product.

## Section 13 - Disposal Considerations

Comply with federal, state, or local regulations for disposal. Landfill solids at permitted sites. Burn concentrated liquids, diluting with clean, low viscosity fuel. Avoid flameouts and assure that emissions comply with all applicable standards/regulations. Dilute aqueous waste may biodegrade. Assure effluent complies with applicable regulations.

## Section 14 - Transport information

### US DOT Information

This material is not hazardous as defined by 49CFR 172.101 by the US Department of Transportation.

### IMDG

***Refer to Current IMDG regulations for full shipping description requirements***

### IATA

***This material is not prepared or packaged for air transportation***

***International shipping requirements must be determined by the party offering the material for transportation***

## Section 15 - Regulatory Information

### U.S. Federal regulations

#### General Product Information

Product is listed under the TSCA. No additional information available.

**United States inventory (TSCA 8b):** This material is listed or exempted.

**SARA 302/304/311/312 extremely hazardous substances:** Chemicals with provided CAS numbers in this material are not subject to the reporting requirements of CERCLA.

**SARA 302/304 emergency planning and notification:** No products were found.

**SARA 302/304/311/312 hazardous chemicals:** Based upon available information, this material is not classified as a health and/or physical hazard according to Section 311 & 312.

# SAFETY DATA SHEET

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## Freeze Ban -50

**SARA 313:** This material does not contain any chemical components with known CAS numbers that exceed the De Minimis reporting levels established by SARA Title III, Section 313 and 40 CFR 372.

**Clean Water Act (CWA) 307:** No products were found.

**Clean Water Act (CWA) 311:** No products were found.

**Clean Air Act (CAA) 112 regulated toxic substances:** No products were found.

### State regulations

**Connecticut Carcinogen Reporting:** This material is not listed.

**Connecticut Hazardous Material Survey:** This material is not listed.

**Florida substances:** This material is not listed.

**Illinois Chemical Safety Act:** This material is not listed.

**Illinois Toxic Substances Disclosure to Employee Act:** This material is not listed.

**Louisiana Reporting:** This material is not listed.

**Louisiana Spill:** This material is not listed.

**Massachusetts Spill:** This material is not listed.

#### **Massachusetts Substances List:**

Extraordinarily hazardous substances must be identified when present in materials at levels greater than state specified criterion. The criterion is  $\geq 0.0001\%$ . Hazardous Substances (MSL-HS) on the MSL must be identified when present in materials at greater than the state specified criterion. The criterion is  $\geq 1\%$ . Components with CAS numbers present in this material, at levels specified in Section 2 - Composition do not require reporting under the statute.

**Michigan Critical Material:** This material is not listed.

**Minnesota Hazardous Substances:** This material is not listed.

**New Jersey Hazardous Substances:** This material is listed.

**New Jersey Spill:** This material is not listed.

**New Jersey Toxic Catastrophe Prevention Act:** This material is not listed.

**New York Acutely Hazardous Substances:** This material is not listed.

**New York Toxic Chemical Release Reporting:** This material is not listed.

#### **Pennsylvania RTK Hazardous Substances:**

Hazardous Substances listed by the State of Pennsylvania must be identified when present in materials at levels greater than the state specified criterion. The criterion is  $\geq 1\%$ . Components with CAS numbers in this material at a level which could require reporting under the statute are: **Propylene Glycol**

Special Hazardous Substances listed by the State of Pennsylvania must be identified when present in materials at levels greater than the state specified criterion. The criterion is  $\geq 0.01\%$ . Components with CAS numbers present in this material, at levels specified in Section 2 - Components, do not require reporting under the statute.

**Rhode Island Hazardous Substances:** This material is not listed

#### **California Prop 65 Warning:**

This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to the proposition.

### Additional Regulatory Information

#### **A: General Product Information**

All components are on the U.S. EPA TSCA Inventory List.

### Section 16 - Other information

<b>NFPA CODES:</b> Health	1
Flammability	1
Reactivity	0

# SAFETY DATA SHEET

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## Freeze Ban -50

Note - NFPA ratings are based on a 0-4 rating scale with 0 representing minimal hazards or risks and 4 representing extreme hazards or risks.

**Date of Preparation/Revision:**                      **May 13, 2013**                      (Supersedes all previous MSDS)

### DISCLAIMER

To the best of our knowledge, the information contained herein is accurate, obtained from sources believed by Camco Manufacturing, Inc., to be accurate. However, the information is provided without any representation or warranty, expressed or implied, regarding its accuracy or correctness.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. It is the responsibility of the user to determine the safety, toxicity and suitability of their own use, handling and disposal of this product.

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29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : Valvoline™ ATF+4 FULL SYNTHETIC AUTOMATIC TRANSMISSION FLUID

### Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : Engine, gear & lubricating oil.


<b>Details of the supplier of the safety data sheet</b>	<b>Emergency telephone number</b>  <b>Product Information</b>
---	---

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Skin sensitization : Category 1

### GHS Label element

Hazard pictograms : 

Signal Word : Warning

Hazard Statements : May cause an allergic skin reaction.

Precautionary Statements : If medical advice is needed, have product container or label at hand.  
 Keep out of reach of children.  
 Read label before use.  
**Prevention:**  
 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
 Contaminated work clothing must not be allowed out of the workplace.  
 Wear protective gloves.  
**Response:**  
 IF ON SKIN: Wash with plenty of soap and water.



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If skin irritation or rash occurs: Get medical advice/ attention.  
Wash contaminated clothing before reuse.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Defatter

**Hazardous components**

Chemical Name	CAS-No.	Classification	Concentration (%)
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	Not a hazardous substance or mixture.	59.33
HEAVY PARAFFINIC DISTILLATE	64742-54-7	Asp. Tox. 1; H304	25.66
Mineral Oil		Asp. Tox. 1; H304	3.10
BENZENE, POLYPROPENE DERIVATIVES, SULFONATED, CALCIUM SALTS		Eye Irrit. 2A; H319 Skin Sens. 1; H317	0.77
DODECYL HYDROXYPROPYL SULFIDE	67124-09-8	Skin Sens. 1; H317	0.77
POLYMER		Skin Sens. 1; H317	0.38

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**SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.

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- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.  
If on skin, rinse well with water.  
First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.  
Wash contaminated clothing before re-use.
- In case of eye contact : Flush eyes with water as a precaution.  
Remove contact lenses.  
Protect unharmed eye.  
If eye irritation persists, consult a specialist.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.
- Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
acne  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)  
May cause an allergic skin reaction.
- Notes to physician : No hazards which require special first aid measures.

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## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray

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- Foam  
Carbon dioxide (CO2)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons  
Aldehydes
- Specific extinguishing methods :  
  
Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapours/dust.  
Do not smoke.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

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Container hazardous when empty.  
 Avoid exposure - obtain special instructions before use.  
 Avoid contact with skin and eyes.  
 Smoking, eating and drinking should be prohibited in the application area.  
 For personal protection see section 8.  
 Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
 Electrical installations / working materials must comply with the technological safety standards.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	REL	5 mg/m3 Mist.	NIOSH/GUID E
		STEL	10 mg/m3 Mist.	NIOSH/GUID E
		PEL	5 mg/m3 Mist.	OSHA_TRANS

**Engineering measures** : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

Hand protection

Remarks

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection

: Wear as appropriate:  
 impervious clothing  
 Safety shoes  
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
 Discard gloves that show tears, pinholes, or signs of wear.

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Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Physical state : liquid

Colour : red

Odour : No data available

Odour Threshold : No data available

pH : No data available

: No data available

: No data available

Flash point : > 390 °F / > 199 °C  
Method: Cleveland open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : 6 %(V)  
Calculated Explosive Limit

Lower explosion limit : 1 %(V)  
Calculated Explosive Limit

Vapour pressure : 0.0133333 hPa (21.11 °C)  
Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : 0.854 (15.6 °C)

Density : 0.8508 g/cm3 (15.56 °C)

Solubility(ies)

Water solubility : negligible

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

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Thermal decomposition : No data available

Viscosity  
 Viscosity, dynamic : < 10,000 mPa.s Method: Brookfield

Viscosity, kinematic : ca. 34 mm<sup>2</sup>/s (40 °C)

Oxidizing properties : No data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Conditions to avoid : excessive heat

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
 Hydrocarbons

---

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
 Skin contact  
 Eye Contact  
 Ingestion

### Acute toxicity

Not classified based on available information.

### Components:

#### HEAVY PARAFFINIC DISTILLATE:

Acute oral toxicity : LD 50 (Rat): > 15 g/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5 g/kg

#### DODECYL HYDROXYPROPYL SULFIDE:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
 GLP: yes

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

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**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Remarks: May cause skin irritation in susceptible persons.

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

HEAVY PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

BENZENE, POLYPROPENE DERIVATIVES, SULFONATED, CALCIUM SALTS:

Result: Possibly irritating to skin

DODECYL HYDROXYPROPYL SULFIDE:

Species: Rabbit

Result: Not irritating to skin

POLYMER:

Result: Not irritating to skin

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Result: Slightly irritating to eyes

Remarks: Expected based on components.

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to eyes

HEAVY PARAFFINIC DISTILLATE:

Result: Not irritating to eyes

BENZENE, POLYPROPENE DERIVATIVES, SULFONATED, CALCIUM SALTS:

Result: Irritating to eyes

DODECYL HYDROXYPROPYL SULFIDE:

Species: Rabbit

Result: Not irritating to eyes

POLYMER:

Result: Not irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

**Components:**

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**BENZENE, POLYPROPENE DERIVATIVES, SULFONATED, CALCIUM SALTS:**  
Assessment: May cause sensitization by skin contact.

**DODECYL HYDROXYPROPYL SULFIDE:**  
Assessment: May cause sensitization by skin contact.  
Result: May cause sensitization by skin contact.

**POLYMER:**  
Assessment: May cause sensitization by skin contact.

**Germ cell mutagenicity**  
Not classified based on available information.

**Carcinogenicity**  
Not classified based on available information.

**Reproductive toxicity**  
Not classified based on available information.

**STOT - single exposure**  
Not classified based on available information.

**STOT - repeated exposure**  
Not classified based on available information.

**Aspiration toxicity**  
Not classified based on available information.

**Components:**  
**HEAVY PARAFFINIC DISTILLATE:**  
May be fatal if swallowed and enters airways.

**Mineral Oil:**  
May be fatal if swallowed and enters airways.

**Further information**

**Product:**  
Remarks: No data available

**Carcinogenicity:**

**IARC** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**HEAVY PARAFFINIC DISTILLATE:**  
Toxicity to fish : LL50 (Fish): > 100 mg/l



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Toxicity to daphnia and other aquatic invertebrates : EL50 (Aquatic invertebrates): > 10,000 mg/l

Toxicity to algae : EL50 (Algae, algal mat (Algae)): > 100 mg/l

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 10 mg/l

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Aquatic invertebrates): 10 mg/l

**DODECYL HYDROXYPROPYL SULFIDE:**

Toxicity to fish : LC 50 (Oncorhynchus mykiss (rainbow trout)): 0.75 mg/l  
 Exposure time: 96 h  
 Test Type: semi-static test  
 Method: OECD Test Guideline 203  
 GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC 50 (Daphnia magna (Water flea)): 0.5 mg/l  
 Exposure time: 21 d  
 End point: see user defined free text  
 Test Type: see user defined free text  
 Method: OECD Test Guideline 211  
 GLP: yes

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life with long lasting effects.

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**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : The product should not be allowed to enter drains, water courses or the soil.  
 Do not contaminate ponds, waterways or ditches with chemical or used container.  
 Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and

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federal regulations.

Contaminated packaging : Empty remaining contents.  
 Dispose of as unused product.  
 Empty containers should be taken to an approved waste handling site for recycling or disposal.  
 Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

**U.S. DOT - ROAD**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TRANSPORT CANADA - ROAD**

Not dangerous goods

**TRANSPORT CANADA - RAIL**

Not dangerous goods

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods

**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

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**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods
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\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
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**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 313 Component(s)SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Pennsylvania Right To Know**

HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	50.00 - 70.00 %
HEAVY PARAFFINIC DISTILLATE	64742-54-7	20.00 - 30.00 %
POLYMER	Not Assigned	5.00 - 10.00 %
LUBRICANT ADDITIVE	Not Assigned	1.00 - 5.00 %
Mineral Oil	Not Assigned	1.00 - 5.00 %

**New Jersey Right To Know**

HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	50.00 - 70.00 %
HEAVY PARAFFINIC DISTILLATE	64742-54-7	20.00 - 30.00 %
POLYMER	Not Assigned	5.00 - 10.00 %
LUBRICANT ADDITIVE	Not Assigned	1.00 - 5.00 %
Mineral Oil	Not Assigned	1.00 - 5.00 %

**California Prop 65** Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

TSCA : On TSCA Inventory

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- DSL : All components of this product are on the Canadian DSL.
- AUSTR : On the inventory, or in compliance with the inventory
- NZIOC : Not in compliance with the inventory
- ENCS : Not in compliance with the inventory
- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**SECTION 16. OTHER INFORMATION**

**Further information**

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<p><b>NFPA:</b></p> <div style="text-align: center;"> <p>Flammability</p> <p>Health: 1, Flammability: 1, Instability: 0</p> <p>Special hazard.</p> </div>	<p><b>HMIS III:</b></p> <table border="1" style="width: 100%;"> <tr> <td style="background-color: blue; color: white;"><b>HEALTH</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: red; color: white;"><b>FLAMMABILITY</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: yellow; color: black;"><b>PHYSICAL HAZARD</b></td> <td style="text-align: center;"><b>0</b></td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

**NFPA Flammable and Combustible Liquids Classification**

Combustible Liquid Class IIIB

**Full text of H-Statements referred to under sections 2 and 3.**

- H304 May be fatal if swallowed and enters airways.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.

Sources of key data used to compile the Safety Data Sheet

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Ashland internal data including own and sponsored test reports  
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists  
BEI : Biological Exposure Index  
CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
FG : Food grade  
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
H-statement : Hazard Statement  
IATA : International Air Transport Association.  
IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization  
ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"  
IMDG : International Maritime Code for Dangerous Goods  
ISO : International Organization for Standardization  
logPow : octanol-water partition coefficient  
LCxx : Lethal Concentration, for xx percent of test population  
LDxx : Lethal Dose, for xx percent of test population.  
ICxx : Inhibitory Concentration for xx of a substance  
Ecxx : Effective Concentration of xx  
N.O.S.: Not Otherwise Specified  
OECD : Organization for Economic Co-operation and Development  
OEL : Occupational Exposure Limit  
P-Statement : Precautionary Statement  
PBT : Persistent , Bioaccumulative and Toxic  
PPE : Personal Protective Equipment  
STEL : Short-term exposure limit  
STOT : Specific Target Organ Toxicity  
TLV : Threshold Limit Value  
TWA : Time-weighted average  
vPvB : Very Persistent and Very Bioaccumulative  
WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act  
DOT : Department of Transportation  
FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act  
HMIRC : Hazardous Materials Information Review Commission  
HMIS : Hazardous Materials Identification System  
NFPA : National Fire Protection Association  
NIOSH : National Institute for Occupational Safety and Health  
OSHA : Occupational Safety and Health Administration  
PMRA : Health Canada Pest Management Regulatory Agency

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Valvoline™ ATF+4 FULL SYNTHETIC AUTOMATIC TRANSMISSION FLUID		Version: 1.1
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RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System













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TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

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NAPA® FULL SYNTHETIC SAE 0W-20 MOTOR OIL 795621		Version: 1.0

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® FULL SYNTHETIC SAE 0W-20  
MOTOR OIL

### Recommended use of the chemical and restrictions on use

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
HEAVY PARAFFINIC DISTILLATE	64742-54-7	Asp. Tox. 1; H304	69.35
Benzenesulfonic acid, C10-60-	90194-32-4	Eye Irrit. 2A; H319	6.21

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alkyl derivs., sodium salts			
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#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.  
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
acne  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)
- Notes to physician : No hazards which require special first aid measures.

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#### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local

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circumstances and the surrounding environment.

Water spray

Foam

Carbon dioxide (CO<sub>2</sub>)

Dry chemical

- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons
- Specific extinguishing methods : Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

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## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : No materials to be especially mentioned.



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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Odour : No data available

Odour Threshold : No data available

pH : No data available

: No data available

Boiling point/boiling range : 626 °F / 330 °C  
(1,013.333333 hPa)  
Calculated Phase Transition Liquid/Gas

Flash point : > 390 °F / > 199 °C  
Method: Cleveland open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : 6 %(V)  
GLP: Calculated Explosive Limit

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Lower explosion limit : 1 %(V)  
GLP: Calculated Explosive Limit

Vapour pressure : 1.3333333 hPa (20 °C)  
Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : No data available

Density : 0.843 g/cm3

Solubility(ies)  
Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity  
Viscosity, dynamic : No data available

Viscosity, kinematic : 45.4 mm2/s (40 °C)

Oxidizing properties : No data available

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Conditions to avoid : None known.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
Hydrocarbons

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## SECTION 11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

**Acute toxicity**

Not classified based on available information.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Acute oral toxicity : LD 50 (Rat): > 15 g/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5 g/kg

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Not irritating to skin

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Result: Slightly irritating to eyes

Remarks: Expected based on components.

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Result: Not irritating to eyes

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

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**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Components:**

HEAVY PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Toxicity to fish : LL50 (Fish): > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates : EL50 (Aquatic invertebrates): > 10,000 mg/l

Toxicity to algae : EL50 (Algae, algal mat (Algae)): > 100 mg/l

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 10 mg/l

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Aquatic invertebrates): 10 mg/l

**Persistence and degradability**

**Components:**

No data available

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**Bioaccumulative potential**

**Components:**

No data available

**Mobility in soil**

**Components:**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

**Components:**

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

**U.S. DOT - ROAD**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TRANSPORT CANADA - ROAD**

Not dangerous goods

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**TRANSPORT CANADA - RAIL**

Not dangerous goods

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods

**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
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Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313 Component(s)SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Pennsylvania Right To Know**

HEAVY PARAFFINIC DISTILLATE	64742-54-7	50.00 - 70.00 %
HYDROTREATED HEAVY PARAFFINIC BASE OIL	64742-54-7	10.00 - 20.00 %
HEAVY PARAFFINIC DISTILLATE	64742-54-7	5.00 - 10.00 %

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Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts      90194-32-4      5.00 - 10.00 %

**New Jersey Right To Know**

HEAVY PARAFFINIC DISTILLATE      64742-54-7      50.00 - 70.00 %

HYDROTREATED HEAVY PARAFFINIC BASE OIL      64742-54-7      10.00 - 20.00 %

HEAVY PARAFFINIC DISTILLATE      64742-54-7      5.00 - 10.00 %

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts      90194-32-4      5.00 - 10.00 %

LUBRICANT ADDITIVE      Not Assigned      1.00 - 5.00 %

**California Prop 65**

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL.
- AUSTR : On the inventory, or in compliance with the inventory
- ENCS : Not in compliance with the inventory
- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : q (quantity restricted)

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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## SECTION 16. OTHER INFORMATION

### Further information

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<b>NFPA:</b>	<b>HMIS III:</b>						
<p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>1</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>PHYSICAL HAZARD</b></td> <td><b>0</b></td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

### NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

### Full text of H-Statements referred to under sections 2 and 3.

H304 May be fatal if swallowed and enters airways.  
H319 Causes serious eye irritation.

Sources of key data used to compile the Safety Data Sheet  
Ashland internal data including own and sponsored test reports  
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists  
BEI : Biological Exposure Index  
CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
FG : Food grade  
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
H-statement : Hazard Statement  
IATA : International Air Transport Association.



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IATA-DGR : Dangerous Goods Regulation by the “International Air Transport Association” (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the “International Civil Aviation Organization”

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System

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		SDS Number: R0396047
NAPA® PREM PERF SYN SAE 5W-20 SYNTHETIC MOTOR OIL		Version: 1.0
643024		

29 CFR 1910.1200 (OSHA HazCom 2012)

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product identifier**

Trade name : NAPA® PREM PERF SYN SAE 5W-20 SYNTHETIC MOTOR OIL

**Recommended use of the chemical and restrictions on use**

<p><b>Details of the supplier of the safety data sheet</b>  Ashland  P.O. Box 2219  Columbus, OH 43216  United States of America</p> <p>EHS Customer Requests@ashland.com</p>	<p><b>Emergency telephone number</b>  1-800-ASHLAND (1-800-274-5263)</p> <p><b>Regulatory Information Number</b>  1-800-325-3751</p> <p><b>Product Information</b>  614-790-3333</p>
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**SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification**

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

**GHS Label element**

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Defatter

**Hazardous components**

Chemical Name	CAS-No.	Classification	Concentration (%)
HEAVY PARAFFINIC DISTILLATE	64742-54-7	Asp. Tox. 1; H304	28.24

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643024		

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	Eye Irrit. 2A; H319	6.22
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#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.  
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
acne  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)
- Notes to physician : No hazards which require special first aid measures.

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#### SECTION 5. FIREFIGHTING MEASURES

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- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO2)  
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons
- Specific extinguishing methods :
- Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : No materials to be especially mentioned.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : amber

Odour : mild

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : Estimated 626 °F / 330 °C

Flash point : > 390 °F / > 199 °C  
Method: Closed Cup

Evaporation rate : < 1  
Ethyl Ether

Flammability (solid, gas) : No data available

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Upper explosion limit : 6 %(V)  
Calculated Explosive Limit

Lower explosion limit : 1 %(V)  
Calculated Explosive Limit

Vapour pressure : 0.1333333 hPa (20 °C)  
Calculated Vapor Pressure

Relative vapour density : > 1AIR=1

Relative density : No data available

Density : 0.849 g/cm3

Solubility(ies)  
Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity  
Viscosity, dynamic : No data available

Viscosity, kinematic : ca. 50 mm2/s (40 °C)

Oxidizing properties : No data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
Hydrocarbons

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## SECTION 11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

**Acute toxicity**

Not classified based on available information.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Acute oral toxicity : LD 50 (Rat): > 15 g/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5 g/kg

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Not irritating to skin

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Result: Not irritating to eyes

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

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**Product:**

No aspiration toxicity classification

**Components:**

HEAVY PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Toxicity to fish : LL50 (Fish): > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates : EL50 (Aquatic invertebrates): > 10,000 mg/l

Toxicity to algae : EL50 (Algae, algal mat (Algae)): > 100 mg/l

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 10 mg/l

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Aquatic invertebrates): 10 mg/l

**Persistence and degradability**

**Components:**

No data available



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**Bioaccumulative potential**

**Components:**

No data available

**Mobility in soil**

**Components:**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

**Components:**

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

**U.S. DOT - ROAD**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TRANSPORT CANADA - ROAD**

Not dangerous goods

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**TRANSPORT CANADA - RAIL**

Not dangerous goods

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods

**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
------------------	----

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313 Component(s)SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Pennsylvania Right To Know**

HYDROTREATED HEAVY PARAFFINIC BASE OIL	64742-54-7	50.00 - 70.00 %
HEAVY PARAFFINIC DISTILLATE	64742-54-7	20.00 - 30.00 %

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Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts      90194-32-4      5.00 - 10.00 %

HEAVY PARAFFINIC DISTILLATE      64742-54-7      1.00 - 5.00 %

**New Jersey Right To Know**

HYDROTREATED HEAVY PARAFFINIC BASE OIL      64742-54-7      50.00 - 70.00 %

HEAVY PARAFFINIC DISTILLATE      64742-54-7      20.00 - 30.00 %

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts      90194-32-4      5.00 - 10.00 %

HEAVY PARAFFINIC DISTILLATE      64742-54-7      1.00 - 5.00 %

LUBRICANT ADDITIVE      Not Assigned      1.00 - 5.00 %

**California Prop 65**

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL.
- AUSTR : On the inventory, or in compliance with the inventory
- ENCS : Not in compliance with the inventory
- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : q (quantity restricted)

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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## SECTION 16. OTHER INFORMATION

### Further information

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<b>NFPA:</b>	<b>HMIS III:</b>						
<p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>1</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>PHYSICAL HAZARD</b></td> <td><b>0</b></td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

### NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

### Full text of H-Statements referred to under sections 2 and 3.

H304 May be fatal if swallowed and enters airways.  
H319 Causes serious eye irritation.

Sources of key data used to compile the Safety Data Sheet  
Ashland internal data including own and sponsored test reports  
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists  
BEI : Biological Exposure Index  
CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
FG : Food grade  
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
H-statement : Hazard Statement

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IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System

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29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® PREM PERF SYN SAE 5W-30  
SYNTHETIC MOTOR OIL

### Recommended use of the chemical and restrictions on use

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
HEAVY PARAFFINIC DISTILLATE	64742-54-7	Asp. Tox. 1; H304	26.23

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Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	Eye Irrit. 2A; H319	6.22
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#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.  
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
acne  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)
- Notes to physician : No hazards which require special first aid measures.

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#### SECTION 5. FIREFIGHTING MEASURES

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- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO2)  
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons
- Specific extinguishing methods :
- Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

---

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : No materials to be especially mentioned.



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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : amber

Odour : mild

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : 626 °F / 330 °C  
(1,013.333333 hPa)  
Calculated Phase Transition Liquid/Gas

Flash point : > 390 °F / > 199 °C  
Method: Cleveland open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

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Upper explosion limit : 6 %(V)  
Calculated Explosive Limit

Lower explosion limit : 1 %(V)  
Calculated Explosive Limit

Vapour pressure : 1.3333333 hPa (20 °C)  
Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : No data available

Density : 0.8473 g/cm3

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : 63.17 mm2/s (40 °C)

Oxidizing properties : No data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
Hydrocarbons

---

## SECTION 11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

**Acute toxicity**

Not classified based on available information.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Acute oral toxicity : LD 50 (Rat): > 15 g/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5 g/kg

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Not irritating to skin

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Result: Not irritating to eyes

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

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**Product:**

No aspiration toxicity classification

**Components:**

HEAVY PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Toxicity to fish : LL50 (Fish): > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates : EL50 (Aquatic invertebrates): > 10,000 mg/l

Toxicity to algae : EL50 (Algae, algal mat (Algae)): > 100 mg/l

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 10 mg/l

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Aquatic invertebrates): 10 mg/l

**Persistence and degradability**

**Components:**

No data available

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**Bioaccumulative potential**

**Components:**

No data available

**Mobility in soil**

**Components:**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

**Components:**

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

**U.S. DOT - ROAD**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TRANSPORT CANADA - ROAD**

Not dangerous goods

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**TRANSPORT CANADA - RAIL**

Not dangerous goods

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods

**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
------------------	----

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313 Component(s)SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Pennsylvania Right To Know**

HYDROTREATED HEAVY PARAFFINIC BASE OIL	64742-54-7	50.00 - 70.00 %
HEAVY PARAFFINIC DISTILLATE	64742-54-7	20.00 - 30.00 %

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HEAVY PARAFFINIC DISTILLATE 64742-54-7 5.00 - 10.00 %

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts 90194-32-4 5.00 - 10.00 %

**New Jersey Right To Know**

HYDROTREATED HEAVY PARAFFINIC BASE OIL 64742-54-7 50.00 - 70.00 %

HEAVY PARAFFINIC DISTILLATE 64742-54-7 20.00 - 30.00 %

HEAVY PARAFFINIC DISTILLATE 64742-54-7 5.00 - 10.00 %

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts 90194-32-4 5.00 - 10.00 %

LUBRICANT ADDITIVE Not Assigned 1.00 - 5.00 %

**California Prop 65**

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL.
- AUSTR : On the inventory, or in compliance with the inventory
- ENCS : Contact your sales representative for additional information.
- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : q (quantity restricted)

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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## SECTION 16. OTHER INFORMATION

### Further information

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<b>NFPA:</b>	<b>HMIS III:</b>						
<p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>1</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>PHYSICAL HAZARD</b></td> <td><b>0</b></td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

### NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

### Full text of H-Statements referred to under sections 2 and 3.

H304 May be fatal if swallowed and enters airways.  
H319 Causes serious eye irritation.

Sources of key data used to compile the Safety Data Sheet  
Ashland internal data including own and sponsored test reports  
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists  
BEI : Biological Exposure Index  
CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
FG : Food grade  
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
H-statement : Hazard Statement



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IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System

# SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR  
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## SECTION 1. IDENTIFICATION

Product name : Shell Gadus S3 V220C 2

Product code : 001D8425

### Manufacturer or supplier's details

Manufacturer/Supplier : **Shell Oil Products US**  
P.O. Box 4427  
Houston TX 77210-4427  
USA

SDS Request : (+1) 877-276-7285  
Customer Service :

### Emergency telephone number

Spill Information : 877-504-9351  
Health Information : 877-242-7400

### Recommended use of the chemical and restrictions on use

Recommended use : Automotive and industrial grease.

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Chronic aquatic toxicity : Category 3

### GHS Label element

Hazard pictograms : No Hazard Symbol required

Signal word : No signal word

Hazard statements : **PHYSICAL HAZARDS:**  
Not classified as a physical hazard under GHS criteria.  
**HEALTH HAZARDS:**  
Not classified as a health hazard under GHS criteria.  
**ENVIRONMENTAL HAZARDS:**  
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P273 Avoid release to the environment.  
**Response:**  
No precautionary phrases.  
**Storage:**  
No precautionary phrases.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

### Other hazards which do not result in classification

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Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Used grease may contain harmful impurities.

High-pressure injection under the skin may cause serious damage including local necrosis.

Not classified as flammable but will burn.

The classification of this material is based on OSHA HCS 2012 criteria.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : A lubricating grease containing highly-refined mineral oils and additives.  
The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

### Hazardous components

Chemical Name	Synonyms	CAS-No.	Concentration (%)
Zinc dialkyl dithiophosphate	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	1 - 2.4
Zinc naphthenate		12001-85-3	0.24 - 2.4

## SECTION 4. FIRST-AID MEASURES

General advice : Not expected to be a health hazard when used under normal conditions.

If inhaled : No treatment necessary under normal conditions of use.  
If symptoms persist, obtain medical advice.

In case of skin contact : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.  
If persistent irritation occurs, obtain medical attention.

When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.  
Obtain medical attention even in the absence of apparent wounds.

In case of eye contact : Flush eye with copious quantities of water.  
If persistent irritation occurs, obtain medical attention.

If swallowed : In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

Most important symptoms and effects, both acute and delayed : Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas.  
Ingestion may result in nausea, vomiting and/or diarrhoea.  
Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection.

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Protection of first-aiders : When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

Immediate medical attention, special treatment : Treat symptomatically.

High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function.

Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetics, and wide exploration is essential.

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## SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media : Do not use water in a jet.

Specific hazards during fire-fighting : Hazardous combustion products may include:  
A complex mixture of airborne solid and liquid particulates and gases (smoke).  
Carbon monoxide may be evolved if incomplete combustion occurs.  
Unidentified organic and inorganic compounds.

Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for firefighters : Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Avoid contact with skin and eyes.

Environmental precautions : Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

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Methods and materials for containment and cleaning up : Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.

Additional advice : For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet.  
For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

## SECTION 7. HANDLING AND STORAGE

Technical measures : Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols.  
Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Precautions for safe handling : Avoid prolonged or repeated contact with skin.  
Avoid inhaling vapour and/or mists.  
When handling product in drums, safety footwear should be worn and proper handling equipment should be used.  
Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Avoidance of contact : Strong oxidising agents.

### Storage

Other data : Keep container tightly closed and in a cool, well-ventilated place.  
Use properly labeled and closable containers.

Store at ambient temperature.

Packaging material : Suitable material: For containers or container linings, use mild steel or high density polyethylene.  
Unsuitable material: PVC.

Container Advice : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Oil mist, mineral	Not Assigned	TWA ((inhalable frac-	5 mg/m <sup>3</sup>	US. ACGIH Threshold

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		tion)) (Mist)	5 mg/m3	Limit Values OSHA_TRANS
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## Biological occupational exposure limits

No biological limit allocated.

## Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods <http://www.cdc.gov/niosh/>

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods <http://www.osha.gov/>

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances <http://www.hse.gov.uk/>

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany <http://www.dguv.de/inhalt/index.jsp>

L'Institut National de Recherche et de Sécurité, (INRS), France <http://www.inrs.fr/accueil>

## Engineering measures

- : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:  
Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

## General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

Practice good housekeeping.

Due to the product's semi-solid consistency, generation of mists and dusts is unlikely to occur.

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## Personal protective equipment

Respiratory protection : No respiratory protection is ordinarily required under normal conditions of use.  
In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.  
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.  
Check with respiratory protective equipment suppliers.  
Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.  
Select a filter suitable for the combination of organic gases and vapours [Type A/Type P boiling point >65°C (149°F)].

Hand protection  
Remarks

: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Eye protection : If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Skin and body protection : Skin protection is not ordinarily required beyond standard work clothes.  
It is good practice to wear chemical resistant gloves.

Protective measures : Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

## Environmental exposure controls

General advice : Take appropriate measures to fulfill the requirements of rele-

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vant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water.  
Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Semi-solid at ambient temperature.

Colour : red

Odour : Slight hydrocarbon

Odour Threshold : Data not available

pH : Not applicable

Drop point : 240 °C / 464 °F Method: IP 396

Initial boiling point and boiling range : Data not available

Flash point :  $\geq 250$  °C /  $\geq 482$  °F  
Method: ASTM D92

Evaporation rate : Data not available

Flammability (solid, gas) : Data not available

Upper explosion limit : Typical 10 %(V)

Lower explosion limit : Typical 1 %(V)

Vapour pressure :  $< 0.5$  Pa (20 °C / 68 °F)  
estimated value(s)

Relative vapour density :  $> 1$  estimated value(s)

Relative density : 0.900 (15 °C / 59 °F)

Density : 900 kg/m<sup>3</sup> (15.0 °C / 59.0 °F)  
Method: Unspecified

Solubility(ies)  
Water solubility : negligible

Solubility in other solvents : Data not available

Partition coefficient: n- : Pow:  $> 6$  (based on information on similar products)



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octanol/water

Auto-ignition temperature : >  
320 °C / 608 °F

Viscosity

Viscosity, dynamic : Data not available

Viscosity, kinematic : Not applicable

Conductivity : This material is not expected to be a static accumulator.

Decomposition temperature : Data not available

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## SECTION 10. STABILITY AND REACTIVITY

Chemical stability : Stable.

Possibility of hazardous reactions : Reacts with strong oxidising agents.

Conditions to avoid : Extremes of temperature and direct sunlight.

Incompatible materials : Strong oxidising agents.

Hazardous decomposition products : Hazardous decomposition products are not expected to form during normal storage.

---

## SECTION 11. TOXICOLOGICAL INFORMATION

Basis for assessment : Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

### Information on likely routes of exposure

Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

### Acute toxicity

#### Product:

Acute oral toxicity : LD50 (rat): > 5,000 mg/kg  
Remarks: Expected to be of low toxicity:

Acute inhalation toxicity : Remarks: Not considered to be an inhalation hazard under normal conditions of use.

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg  
Remarks: Expected to be of low toxicity:

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## Skin corrosion/irritation

### Product:

Remarks: Expected to be slightly irritating., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

## Serious eye damage/eye irritation

### Product:

Remarks: Expected to be slightly irritating.

## Respiratory or skin sensitisation

### Product:

Remarks: Not expected to be a skin sensitiser.

## Germ cell mutagenicity

### Product:

: Remarks: Not considered a mutagenic hazard.

## Carcinogenicity

### Product:

Remarks: Not expected to be carcinogenic.

Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

<b>IARC</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
<b>NTP</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## Reproductive toxicity

### Product:

: Remarks: Not expected to impair fertility., Not expected to be

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a developmental toxicant.

## STOT - single exposure

### Product:

Remarks: Not expected to be a hazard.

## STOT - repeated exposure

### Product:

Remarks: Not expected to be a hazard.

## Aspiration toxicity

### Product:

Not considered an aspiration hazard.

## Further information

### Product:

Remarks: Used grease may contain harmful impurities that have accumulated during use. The concentration of such harmful impurities will depend on use and they may present risks to health and the environment on disposal., ALL used grease should be handled with caution and skin contact avoided as far as possible.

Remarks: High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

Remarks: Slightly irritating to respiratory system.

---

## SECTION 12. ECOLOGICAL INFORMATION

Basis for assessment : Ecotoxicological data have not been determined specifically for this product.  
Information given is based on a knowledge of the components and the ecotoxicology of similar products.  
Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).(LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract).

### Ecotoxicity

#### Product:

Toxicity to fish (Acute toxicity) :  
Remarks: Expected to be harmful:  
LL/EL/IL50 10-100 mg/l

Toxicity to daphnia and other aquatic invertebrates (Acute toxicity) :  
Remarks: Expected to be harmful:  
LL/EL/IL50 10-100 mg/l

Toxicity to algae (Acute toxic- :)



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Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

- Waste from residues : Recover or recycle if possible.  
It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.  
Do not dispose into the environment, in drains or in water courses
- Contaminated packaging : Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.  
Disposal should be in accordance with applicable regional, national, and local laws and regulations.
- Local legislation  
Remarks : Disposal should be in accordance with applicable regional, national, and local laws and regulations.

## SECTION 14. TRANSPORT INFORMATION

### National Regulations

#### US Department of Transportation Classification (49 CFR Parts 171-180)

Not regulated as a dangerous good

### International Regulation

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Pollution category : Not applicable  
Ship type : Not applicable  
Product name : Not applicable  
Special precautions : Not applicable

### Special precautions for user

- Remarks : Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

**Additional Information** : MARPOL Annex 1 rules apply for bulk shipments by sea.

# SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Version 2.0

Revision Date: 05/21/2015

Print Date: 05/22/2015

## SECTION 15. REGULATORY INFORMATION

**OSHA Hazards** : No OSHA Hazards

### **EPCRA - Emergency Planning and Community Right-to-Know Act**

#### **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ., Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA.

#### **SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

Zinc dialkyl dithiophosphate	68649-42-3	1.6 %
------------------------------	------------	-------

#### **Clean Water Act**

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

#### **Pennsylvania Right To Know**

Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0
---	------------

#### **New Jersey Right To Know**

Zinc dialkyl dithiophosphate	68649-42-3
------------------------------	------------

**California Prop 65** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### **The components of this product are reported in the following inventories:**

**EINECS** : All components listed or polymer exempt.

**TSCA** : All components listed.

**DSL** : All components listed.

## SECTION 16. OTHER INFORMATION

### **Further information**

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NFPA Rating (Health, Fire, Reactivity) 0, 1, 0

Due to the conversion of this product to GHS classification and labelling, there has been a significant change to the nature of the information presented in chapter 2.

A vertical bar (|) in the left margin indicates an amendment from the previous version.

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.

ACGIH = American Conference of Governmental Industrial Hygienists

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road

AICS = Australian Inventory of Chemical Substances

ASTM = American Society for Testing and Materials

BEL = Biological exposure limits

BTEX = Benzene, Toluene, Ethylbenzene, Xylenes

CAS = Chemical Abstracts Service

CEFIC = European Chemical Industry Council

CLP = Classification Packaging and Labelling

COC = Cleveland Open-Cup

DIN = Deutsches Institut für Normung

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

DSL = Canada Domestic Substance List

EC = European Commission

EC50 = Effective Concentration fifty

ECETOC = European Center on Ecotoxicology and Toxicology Of Chemicals

ECHA = European Chemicals Agency

EINECS = The European Inventory of Existing Commercial Chemical Substances

EL50 = Effective Loading fifty

ENCS = Japanese Existing and New Chemical Substances Inventory

EWC = European Waste Code

GHS = Globally Harmonised System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IC50 = Inhibitory Concentration fifty

IL50 = Inhibitory Level fifty

IMDG = International Maritime Dangerous Goods

INV = Chinese Chemicals Inventory

IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables

KECI = Korea Existing Chemicals Inventory

LC50 = Lethal Concentration fifty

LD50 = Lethal Dose fifty per cent.

LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading

LL50 = Lethal Loading fifty

MARPOL = International Convention for the Prevention of Pollution From Ships

NOEC/NOEL = No Observed Effect Concentration / No Ob-

# SAFETY DATA SHEET

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served Effect Level

OE\_HPVS = Occupational Exposure - High Production Volume

PBT = Persistent, Bioaccumulative and Toxic

PICCS = Philippine Inventory of Chemicals and Chemical  
Substances

PNEC = Predicted No Effect Concentration

REACH = Registration Evaluation And Authorisation Of  
Chemicals

RID = Regulations Relating to International Carriage of Dan-  
gerous Goods by Rail

SKIN\_DES = Skin Designation

STEL = Short term exposure limit

TRA = Targeted Risk Assessment

TSCA = US Toxic Substances Control Act

TWA = Time-Weighted Average

vPvB = very Persistent and very Bioaccumulative

Revision Date : 05/21/2015

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



**Prod.Name:** GM SYNCROMESH TRANSMISSION FLUID (RDL 2543)  
**Manufacturer:** PETRO-CANADA  
**Supplier:** PETRO-CANADA  
**HMCS ID:** 218317  
**SUC:** 04 - Metal Working Fluids and Lubricants

## MATERIAL SAFETY DATA SHEET

**Revision:** 01.Apr.1992  
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### 1 PRODUCT AND COMPANY IDENTIFICATION

#### PRODUCT INFORMATION

**Product Name:** GM SYNCROMESH TRANSMISSION FLUID (RDL 2543)

**Product Synonyms:**

470-838-0 PRODUCT CODE  
 RDL 2543  
 RDL-2543 (FORMERLY)  
 SYNCHOMESH TRANSMISSION FLUID  
 12345349

**Recommended Use:**

APPLICATION: THIS PRODUCT IS A STANDARD TRANSMISSION FLUID DESIGNED FOR USE IN SPECIFIED STANDARD TRANSAXLES IN FRONT WHEEL DRIVE GENERAL MOTOR VEHICLES.

#### MANUFACTURER INFORMATION

**Manufacturer:** PETRO-CANADA

**Address:**

P.O. BOX 2844                      CAN    ALBERTA    T2P3E3    CALGARY                      MAILING

**Communication Lines:**

Phone	613-996-6666	CHEMTREC
Phone	403-296-3000	EMERGENCY
Phone	905-804-4752	INFO

#### SUPPLIER INFORMATION

**Supplier:** PETRO-CANADA

**Address:**

P.O. BOX 2844                      CAN    ALBERTA    T2P3E3    CALGARY                      MAILING

**Communication Lines:**

Phone	613-996-6666	CHEMTREC
Phone	403-296-3000	EMERGENCY
Phone	905-804-4752	INFO

### 2 INGREDIENT INFORMATION

**Chemical Family:** PETROLEUM HYDROCARBON

#### FORMULATION

**Ingredients:**

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Prefix</u>	<u>Value</u>	<u>Unit</u>	<u>Exposure Limits</u>
Lubricating oils, petroleum, C15-30, hydrotreated neutral oil-based	72623-86-0	<	100	% Wt	No
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based	72623-87-1	<	100	% Wt	No
POUR POINT DEPRESSANT	989903-63-2	<	27	% Wt	No
VISCOSITY INDEX IMPROVER	989919-17-4	<	27	% Wt	No
ANTIFOAM	989923-43-5	<	27	% Wt	No
GEAR OIL ADDITIVE	989923-58-7	<	27	% Wt	No

**Comment:**

Other Information: TOGETHER CAS#S 72623860 & 72623871 COMPRISE >63% BY VOL. // OTHER EXPOSURE LIMITS: ALLOWABLE LIMITS (8 H): SEVERELY HYDROTREATED HYDROCARBON OIL (C20-C35): 5 MG/M3 (OIL MIST).

### 3 HAZARDS IDENTIFICATION

**Specific Hazards (Routes Of Exposure):**

<u>Exposure Routes</u>	<u>Exposure Duration</u>	<u>Observation</u>
Skin Contact	General	PROLONGED OR REPEATED CONTACT WITH SKIN MAY CAUSE MILD IRRITATION ANDPOSSIBLY DERMATITIS.
Eye Contact	General	MILDLY IRRITATING TO EYES.
Inhalation	General	IF SPRAYED OR MISTED, MAY CAUSE CHEMICAL PNEUMONITIS.
Ingestion	General	LOW TOXICITY ON INGESTION. HAS

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Exposure Routes

Exposure Duration

Observation

LAXATIVE EFFECT.

### 4 FIRST AID MEASURES

**First Aid By::**

**Inhalation** EVACUATE TO FRESH AIR. APPLY CARDIO PULMONARY RESUSCITATION IF REQUIRED. ADMINISTER OXYGEN IF AVAILABLE. IF RESUSCITATION REQUIRED, PHYSICIAN ASSESSMENT MANDATORY. ASPIRATION: IF ASPIRATED INTO LUNGS, PHYSICIAN ASSESSMENT MANDATORY.

**Skin Contact** REMOVE CONTAMINATED CLOTHING - LAUNDRER BEFORE REUSE. SOAP AND WATER WASH. DISCARD SATURATED LEATHER ARTICLES.

**Eye Contact** COPIOUS WARM WATER FLUSH - 15 MINUTES. PHYSICIAN ASSESSMENT IF EYE INFLAMED.

**Ingestion** DO NOT INDUCE VOMITING. FORCE FLUIDS. ACTIVATED CHARCOAL TABLETS.

**Notes To Physician:**

GASTRIC LAVAGE SHOULD ONLY BE DONE AFTER ENDOTRACHEAL INTUBATION IN VIEW OF THE RISK OR ASPIRATION WHICH CAN CAUSE SERIOUS CHEMICAL PNEUMONITIS FOR WHICH ANTIBIOTIC CORTICOSTEROID THERAPY MAY BE INDICATED.

### 5 FIRE FIGHTING MEASURES

**Flash Point:**

= 164 C COC. Flash Point Text:(MINIMUM).

**Explosive Limits:**

Upper Explosive Limit N/A  
(UEL)

Lower Explosive Limit N/A  
(LEL)

**Autoignition Temperature:**

> 250 C

**Extinguishing Media:**

DRY CHEMICAL OR CARBON DIOXIDE FOR SMALL FIRES. WATER SPRAY OR FOAM FOR LARGE FIRES.

**Fire and Explosion Hazards:**

LOW FIRE HAZARD. ADDITION OF WATER OR FOAM MAY CAUSE FROTHING. DO NOT CUT, DRILL OR WELD EMPTY CONTAINERS.

**Special Fire Fighting Procedures:**

CONTAIN SPILL. COVER WITH EXTINGUISHING AGENT. USE WATER SPRAY TO COOL FIRE-EXPOSED CONTAINERS AND AS A PROTECTIVE SCREEN. DO NOT POINT SOLID WATER STREAM DIRECTLY INTO BURNING PRODUCT TO AVOID SPREADING. WEAR SELF-CONTAINED BREATHING APPARATUS WHEN FIGHTING FIRES IN CONFINED AREAS.

### 6 ACCIDENTAL RELEASE MEASURES

**Comment:**

Spill or Leak Procedures: CONTAIN SPILL. ABSORB WITH INERT ABSORBENT SUCH AS DRY CLAY, SAND OR DIATOMACEOUS EARTH, COMMERCIAL SORBENTS, OR RECOVER USING PUMPS. SCOOP UP USED ABSORBENT AND RAGS INTO DRUMS.

### 7 HANDLING AND STORAGE

**STORAGE**

**Additional Information on Storage Conditions:**

Precautions to be Taken in Handling and Storage: STORE IN COOL, WELL-VENTILATED AREA. WASH HANDS AFTER HANDLING AND BEFORE EATING. AVOID INHALATION AND SKIN CONTACT. LAUNDRER WORK CLOTHES FREQUENTLY. DISCARD SATURATED LEATHER GOODS.

### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures:**

Ventilation: GENERAL VENTILATION.

**PERSONAL PROTECTIVE EQUIPMENT**

**Personal Protective Equipment (PPE):**

**Eye Protection** NONE NORMALLY REQUIRED; CHEMICAL GOGGLES IF SPLASHING LIKELY OR HIGH-PRESSURE SYSTEMS USED.

**Respiratory Protection** NORMALLY NOT NECESSARY. IF MIST GENERATED BY HEATING, SPRAYING, ETC., WEAR APPROVED ORGANIC VAPOUR RESPIRATOR SUITABLE FOR OIL MIST IN AREAS WITH

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General  
Protection  
Hand Protection

SUFFICIENT OXYGEN.  
OTHER PROTECTIVE CLOTHING: WEAR LONG  
SLEEVED CLOTHING TO MINIMIZE SKIN CONTACT.  
FOR DIRECT CONTACT WITH HYDROCARBONS OF  
MORE THAN TWO HOURS, NITRILE OR VITON  
RECOMMENDED. OTHERWISE, PVC GLOVES MAY  
BE WORN.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

#### APPEARANCE

**Color:** AMBER VISCOUS LIQUID.

**Odor:** FAINT HYDROCARBON ODOUR.

#### PHYSICAL PROPERTIES

##### Changes of State:

Boiling Point	Range	350	C	(@ 1 ATM)
Pourpoint	=	-48	C	

##### Vapor Pressure:

(@ 25 C): <0.001 KPA

##### Vapor Density:

(@ 20 C): NOT APPLICABLE.

##### Evaporation Rate:

NOT APPLICABLE.

##### Density:

Density Density Text:(@ 15 C): APPROX.  
0.88 KG/L.

##### Solubility:

Water Solubility in Water Text:NEGLIGIBLE.

##### Viscosity:

Viscosity (KINEMATIC) (@ 40 C): 38  
CST (TYPICAL)

##### Total Amount Of::

Percent Volatile by Weight (@ 20 C): 0%

### 10 STABILITY AND REACTIVITY

#### STABILITY INFORMATION

**Stability Under Normal Conditions:** Stable

##### Conditions to Avoid:

EXCESSIVE HEAT.

##### Incompatible Materials:

STRONG OXIDIZING AGENTS (PEROXIDES, CHLORINE, STRONG ACIDS, ETC.).

##### Hazardous Polymerization:

Hazardous Polymerization: None. Hazardous Polymerization Text: CANNOT OCCUR.

#### HAZARDOUS DECOMPOSITION

##### Reactions:

###### Type of Reaction

Decomposition

###### Reaction Products

OXIDES OF CARBON; OXIDES OF SULFUR; OXIDES OF NITROGEN; OXIDES ZINC,  
PHOSPHOROUS, AND MAGNESIUM; SMOKE ON COMBUSTION.

##### Comment:

Stability Text: STABLE.

### 11 TOXICOLOGICAL INFORMATION

#### OCCUPATIONAL EXPERIENCES

##### Additional Observations:

Acute Oral Effects: ESTIMATED ACUTE LD50 >5000 MG/KG (RAT, ORAL) PRACTICALLY NON-TOXIC. BASED ON TOXICITY OF SEVERELY HYDROTREATED BASE OILS.

#### CLASSIFICATION OF INGREDIENTS

##### Comment:

Toxicological Data Unlimited Text: SEVERELY HYDROTREATED BASE OILS ARE NEGATIVE WHEN TESTED BY THE MODIFIED AMES TEST.

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### 12 ECOLOGICAL INFORMATION

### 13 DISPOSAL CONSIDERATIONS

**Waste Disposal Information:**

DISPOSE IN APPROVED, SECURE CONTAMINATED WASTE LANDFILL SITE OR LICENSED WASTE RECLAIMER FACILITY. CHECK WITH APPLICABLE JURISDICTIONS FOR SPECIFIC DISPOSAL REQUIREMENTS.

### 14 TRANSPORT INFORMATION

**Comment:**

UN NUMBER: NOT REGULATED. // PRIMARY CLASSIFICATION: NOT REGULATED. // SUBSIDIARY CLASSIFICATION: NOT REGULATED. // COMPATIBILITY GROUPS: NOT REGULATED. // CANUTEC TRANSPORT EMERGENCY NO.: (613) 996-6666.

### 15 REGULATORY INFORMATION

**LABELLING**

**Hazard Codes:**

NFPA Flammability 1  
NFPA Health 2  
NFPA Reactivity 1

**NATIONAL REGULATIONS**

**Immediate Health:** No

**Delayed Health:** No

**Fire:** No

**Sudden Pressure Release:** No

**Reactive:** No

**Comment:**

WHMIS CLASS: NOT CONTROLLED.

### 16 OTHER INFORMATION













# NAPA Heavy Duty Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : NAPA Heavy Duty Concentrate Antifreeze & Coolant

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Heavy Duty Engine Coolant

#### 1.3. Details of the supplier of the safety data sheet

Old World Industries, LLC  
4065 Commercial Ave.  
Northbrook, IL 60062 - USA  
T (847) 559-2000  
[www.oldworldind.com](http://www.oldworldind.com)

#### 1.4. Emergency telephone number

Emergency number : (800) 424-9300; (703) 527 3887 (International)  
Chemtrec

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Acute Tox. 4 (Oral) H302  
STOT RE 2 H373

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

GHS08

Signal word (GHS-US) : Warning  
Hazard statements (GHS-US) : H302 - Harmful if swallowed  
H373 - May cause damage to organs (kidneys) through prolonged or repeated exposure (oral)  
Precautionary statements (GHS-US) : P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P260 - Do not breathe mist, spray, vapors  
P264 - Wash affected areas thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P280 - Wear personal protective equipment as required  
P301+P310 - If swallowed: Immediately call doctor/physician or poison center  
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing  
P308+P313 - If exposed or concerned: Get medical advice/attention  
P405 - Store locked up  
P501 - Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

# NAPA Heavy Duty Concentrate Antifreeze & Coolant

## Safety Data Sheet

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	% by wt	GHS-US classification
ethylene glycol	(CAS No) 107-21-1	90 - 97	Acute Tox. 4 (Oral), H302
diethylene glycol	(CAS No) 111-46-6	< 5	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
water	(CAS No) 7732-18-5	< 4	Not classified
denatonium benzoate	(CAS No) 3734-33-6	30 - 50 ppm	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek immediate medical advice. Allow the victim to rest. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
First-aid measures after skin contact	: Remove contaminated clothing. Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Rinse immediately with plenty of water (for at least 15 minutes). Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label).
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse immediately with plenty of water for 15 minutes, lifting lower and upper lids. If eye irritation persists: Rinse immediately with plenty of water. Get medical advice/attention.
First-aid measures after ingestion	: Obtain emergency medical attention. Rinse mouth. If the person is fully conscious, make him/her drink two glasses of water. Never give an unconscious person anything to drink. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell. If medical advice is delayed, and if the person has swallowed a moderate volume of material (a few ounces), then give three to four ounces of hard liquor, such as whiskey. For children, give proportionally less liquor, according to weight.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Causes damage to organs (kidneys) oral.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100 mL (3 oz).

#### 4.3. Indication of any immediate medical attention and special treatment needed

A more effective intravenous antidote for physician uses is 4-methylpyrazaole, a potent inhibitor of alcohol dehydrogenases, which effectively blocks the formation of toxic metabolites of ethylene glycol. It has been used to decrease the metabolic consequences of ethylene glycol poisoning before metabolic acidosis coma, seizures, and renal failure have occurred.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Water fog. Fine water spray. Alcohol-resistant foam. Foam. Carbon dioxide. Dry chemical powder. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream. May spread fire.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.
Reactivity	: No dangerous reactions known under normal conditions of use.

#### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

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Special protective equipment for fire fighters : Wear positive pressure self-contained breathing apparatus (SCBA). Protective fire fighting clothing (includes fire-fighting helmet, coat, pants, boots and gloves).

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Refer to section 8.2.

Emergency procedures : Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Heat sources. Keep container closed when not in use. Product may become solid at temperatures below -18 °C (0 °F). Do not store near food, foodstuffs, drugs or potable water supplies. Do not cut, drill, weld, use a blowtorch on, etc. containers even when empty.

Incompatible products : Keep away from strong acids, strong bases and oxidizing agents.

Incompatible materials : Sources of ignition.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### ethylene glycol (107-21-1)

USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	100.00 mg/m <sup>3</sup>
USA ACGIH	Remark (ACGIH)	Upper Respiratory Tract (URT) & Eye irritant

#### 8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure. Gloves. Safety glasses.



Hand protection : Wear protective gloves.

Eye protection : Chemical goggles or safety glasses.

Respiratory protection : If exposed to levels above exposure limits wear appropriate respiratory protection.

Other information : Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

# NAPA Heavy Duty Concentrate Antifreeze & Coolant

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Color	: Pink
Odor	: Mild
Odor threshold	: No data available
pH 50% water solution	: 10.5 - 11
Relative evaporation rate (butylacetate=1)	: Nil
Freezing point	: -18 °C (0 °F)
Boiling point	: 158 °C (317 °F)
Flash point	: 116 °C (241 °F) [100% Ethylene Glycol] <i>ASTM D56</i>
Auto-ignition temperature	: 400 °C (752 °F) [100% Ethylene Glycol] <i>Literature</i>
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: < 0.1 mm Hg @ 20 °C
Relative vapor density at 20 °C	: No data available
Specific Gravity	: 1.12
Density	: 1.12 kg/l (9.3 lbs/gal)
Solubility	: Water: Complete
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: 3.2 - 15.3 vol %

### 9.2. Other information

VOC content : 0.00 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

### 10.2. Chemical stability

Stable.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

### 10.4. Conditions to avoid

Keep away from any flames or sparking source. Extremely high or low temperatures.

### 10.5. Incompatible materials

Keep away from strong acids, strong bases and oxidizing agents.

### 10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Fume. Alcohols. Aldehydes. Ethers.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

<b>denatonium benzoate (3734-33-6)</b>	
LD50 oral rat	584 mg/kg (Rat)
LD50 dermal rabbit	> 2,000 mg/kg (Rabbit)
ATE US (oral)	584 mg/kg bodyweight
<b>diethylene glycol (111-46-6)</b>	
LD50 oral rat	12,565 mg/kg (Rat)
LD50 dermal rabbit	11,890 mg/kg (Rabbit)
ATE US (oral)	500 mg/kg bodyweight

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<b>denatonium benzoate (3734-33-6)</b>	
ATE US (dermal)	11,890 mg/kg bodyweight
<b>ethylene glycol (107-21-1)</b>	
LD50 oral rat	> 5,000 mg/kg (Rat)
ATE US (oral)	500 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: May cause damage to organs (kidneys) through prolonged or repeated exposure (oral).
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard. The lethal dose in humans is estimated to be 100 mL (3 oz).

## SECTION 12: Ecological information

### 12.1. Toxicity

<b>denatonium benzoate (3734-33-6)</b>	
LC50 fish 1	> 1,000 mg/l 96 h; <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> )
EC50 Daphnia 1	13 mg/l (48 h; <i>Daphnia magna</i> )
<b>diethylene glycol (111-46-6)</b>	
LC50 fish 1	> 5,000 ppm (24 h; <i>Carassius auratus</i> )
LC50 other aquatic organisms 1	1,174 mg/l ( <i>Xenopus laevis</i> )
EC50 Daphnia 1	> 10,000 mg/l (24 h; <i>Daphnia magna</i> )
LC50 fish 2	61,072 ppm (168 h; <i>Poecilia reticulata</i> )
TLM fish 1	> 32,000 mg/l (96 h; <i>Gambusia affinis</i> )
TLM other aquatic organisms 1	> 1,000 ppm (96 h)
Threshold limit other aquatic organisms 1	1,174 mg/l (72 h; <i>Xenopus laevis</i> ; Toxicity test)
Threshold limit other aquatic organisms 2	10,745 mg/l (16 h; Protozoa; Toxicity test)
Threshold limit algae 1	2,700 mg/l (168 h; <i>Scenedesmus quadricauda</i> )
Threshold limit algae 2	100 mg/l ( <i>Selenastrum capricornutum</i> )
<b>ethylene glycol (107-21-1)</b>	
LC50 fish 1	53,000 mg/l (96 h; <i>Pimephales promelas</i> ; Static system)
EC50 Daphnia 1	> 10,000 mg/l (24 h; <i>Daphnia magna</i> )
LC50 fish 2	40,761 mg/l (96 h; <i>Salmo gairdneri</i> ( <i>Oncorhynchus mykiss</i> ); Static system)
Threshold limit algae 1	> 10,000 mg/l (168 h; <i>Scenedesmus quadricauda</i> )
Threshold limit algae 2	2,000 mg/l (192 h; <i>Microcystis aeruginosa</i> )

### 12.2. Persistence and degradability

<b>denatonium benzoate (3734-33-6)</b>	
Persistence and degradability	Biodegradability in water: no data available. No (test) data on mobility of the substance available.
<b>diethylene glycol (111-46-6)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Photolysis in the air.
Biochemical oxygen demand (BOD)	0.02 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.51 g O <sub>2</sub> /g substance
ThOD	1.51 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.015 % ThOD

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<b>ethylene glycol (107-21-1)</b>	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.47 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.24 g O <sub>2</sub> /g substance
ThOD	1.29 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.36 % ThOD

### 12.3. Bioaccumulative potential

<b>denatonium benzoate (3734-33-6)</b>	
Log Pow	1.78 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>diethylene glycol (111-46-6)</b>	
Log Pow	-1.98
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>ethylene glycol (107-21-1)</b>	
BCF fish 1	10 (72 h; <i>Leuciscus idus</i> )
BCF other aquatic organisms 1	0.21 - 0.6 ( <i>Procambarus</i> sp.; Chronic)
BCF other aquatic organisms 2	190 (24 h; Algae)
Log Pow	-1.34 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

### 12.4. Mobility in soil

<b>diethylene glycol (111-46-6)</b>	
Surface tension	0.0485 N/m
<b>ethylene glycol (107-21-1)</b>	
Surface tension	0.048 N/m (20 °C / 68 °F)

### 12.5. Other adverse effects

Effect on ozone layer	: No known effect on the ozone layer
Effect on global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations.
Ecology - waste materials	: Avoid release to the environment.

## SECTION 14: Transport information

In accordance with DOT	
Transport document description	: UN3082 Environmentally hazardous substances, liquid, n.o.s., 9, III
UN-No.(DOT)	: 3082
DOT NA no.	: UN3082
Proper Shipping Name (DOT)	: Environmentally hazardous substances, liquid, n.o.s.
Department of Transportation (DOT) Hazard Classes	: 9 - Class 9 - Miscellaneous hazardous material 49 CFR 173.140
Hazard labels (DOT)	: 9 - Class 9 (Miscellaneous dangerous materials)



DOT Symbols	: G - Identifies PSN requiring a technical name
Packing group (DOT)	: III - Minor Danger
DOT Packaging Exceptions (49 CFR 173.xxx)	: 155
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203

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DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: No limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: No limit
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
Other information	: Non Bulk: Not regulated by the US D.O.T. (in quantities under 5,000 lbs in any one inner package).

### ADR

No additional information available

### Transport by sea

UN-No. (IMDG) : Not regulated by IMDG (in quantities under 5,000 lbs in any one inner package)

### Air transport

UN-No.(IATA) : Not regulated by IATA (in quantities under 5,000 lbs in any one inner package)

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

<b>NAPA Heavy Duty Concentrate Antifreeze &amp; Coolant</b>	
EPA TSCA Regulatory Flag	Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed
<b>denatonium benzoate (3734-33-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>diethylene glycol (111-46-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>ethylene glycol (107-21-1)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb(s)
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Ethylene glycol is subject to Tier I and/or Tier II annual inventory reporting.
SARA Section 313 - Emission Reporting	Ethylene glycol is subject to Form R Reporting requirements.

### 15.2. International regulations

#### CANADA

<b>NAPA Heavy Duty Concentrate Antifreeze &amp; Coolant</b>	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

#### WHMIS Classification



Class D Division 2  
Subdivision A - Very  
toxic material  
causing other toxic  
effects

#### EU-Regulations

No additional information available

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Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

### 15.2.2. National regulations

#### NAPA Heavy Duty Concentrate Antifreeze & Coolant

DSL (Canada): The intentional ingredients of this product are listed  
ECL (South Korea): The intentional ingredients of this product are listed.  
EINECS (Europe): The intentional ingredients of this product are listed  
ENCS (Japan): The intentional ingredients of this product are listed

### 15.3. US State regulations

#### diethylene glycol (111-46-6)

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

#### ethylene glycol (107-21-1)

U.S. - Massachusetts - Right To Know List  
U.S. - New Jersey - Right to Know Hazardous Substance List  
U.S. - Pennsylvania - RTK (Right to Know) List

## SECTION 16: Other information

Full text of H-phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure

NFPA health hazard

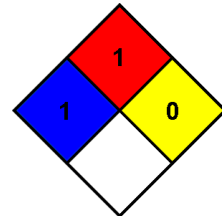
: 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.

NFPA fire hazard

: 1 - Must be preheated before ignition can occur.

NFPA reactivity

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 1 Slight Hazard

Physical : 0 Minimal Hazard

Personal Protection : B

SDS GHS US (GHS HazCom 2012) OWI

Old World Industries, LLC makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Old World Industries, LLC as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does Old World Industries, LLC assume liability arising out of the use by others of this product referred to herein. The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



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# Lithium Complex Grease

Safety Data

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Version: LithiumCom.001

## SECTION 1: IDENTIFICATION

### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** CAM2 Ultraplex, CAM2 Hi-Temp Red Lithium Complex Grease

**Product Grades:** Lithium Complex #2

**Synonyms:** Grease

### 1.2. Intended Use of the Product

Grease

### 1.3. Name, Address, and Telephone of the Responsible Party

#### Company

CAM2 International, LLC

683 Haining Road

Vicksburg, MS 39183

(800) 338-2262

www.CAM2.com

### 1.4. Emergency Telephone Number

**Emergency Number** : 1-800-633-8253

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

**Classification (GHS-US)**

Not Classified

Full text of H-phrases: see section 16

### 2.2. Label Elements

**GHS-US Labeling**

**Hazard Pictograms (GHS-US)** : Not Classified

**Signal Word (GHS-US)** :

**Hazard Statements (GHS-US)** : None Required

**Precautionary Statements (GHS-US)** : P273 - Avoid release to the environment.  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

### 2.3. Other Hazards

None noted

### 2.4. Unknown Acute Toxicity (GHS-US)

None of the mixture consists of ingredient(s) of unknown acute toxicity.



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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

Not applicable

### 3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Petroleum distillates, solvent dewaxed	(CAS No) 64742-65-0	60 – 75, 70 - 85	Not Classified
Lithium Hydroxide, Monohydrate	(CAS No) 310-66-3	<2	H314: Skin Corr, 1B H302: Acute Toxicity, 4
Sebacic Acid	(CAS No) 111-20-6	<3	Not Classified
12-Hydroxystearic Acid	(CAS No) 106-14-9	5 - 15	Not Classified

\*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

\*More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Do NOT induce vomiting. Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** No known significant effects or critical hazards.

**Inhalation:** Overexposure may be irritating to the respiratory system.

**Skin Contact:** Repeated or prolonged skin contact may cause irritation.

**Eye Contact:** Direct contact with the eyes is likely irritating.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** No known significant effects or critical hazards.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable but will support combustion.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be



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present.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Under fire conditions, may produce fumes, smoke, oxides of carbon and hydrocarbons.

**Other Information:** Refer to Section 9 for flammability properties.

### Reference to Other Sections

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Strong oxidizing agents.

### 7.3. Specific End Use(s)

Grease

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Mineral Oils		
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (excluding metal working fluids, highly & severely refined-inhalable fraction)

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<b>USA ACGIH</b>	ACGIH STEL	10 mg/m <sup>3</sup> (excluding metal working fluids, highly & severely refined-inhalable fraction)
<b>USA OSHA</b>	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
<b>Canada</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
<b>Canada</b>	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>

## 8.2. Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Protective goggles. Gloves. Insufficient ventilation: wear respiratory protection.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical goggles or safety glasses.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

**Environmental Exposure Controls:** Do not allow the product to be released into the environment.

**Consumer Exposure Controls:** Do not eat, drink or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties: See Product Data Sheet for Grade Specifics

<b>Physical State</b>	: Semi-Solid At Room Temperature
<b>Appearance</b>	: Varies by Grade
<b>Odor</b>	: Slight Hydrocarbon
<b>Odor Threshold</b>	: Not available
<b>pH</b>	: Not available
<b>Evaporation Rate</b>	: Not available
<b>Melting Point</b>	: Not available
<b>Boiling Point</b>	: Not available
<b>Flash Point</b>	: Typical 150 °C (COC) (350°C/662°F)
<b>Auto-ignition Temperature</b>	: Not available
<b>Decomposition Temperature</b>	: Not available
<b>Flammability (solid, gas)</b>	: Not available
<b>Lower Flammable Limit</b>	: Not available
<b>Upper Flammable Limit</b>	: Not available
<b>Vapor Pressure</b>	: Not available
<b>Relative Vapor Density at 20 °C</b>	: Not available
<b>Relative Density</b>	: Not available
<b>Specific Gravity</b>	: Not available
<b>Solubility</b>	: Negligible
<b>Partition Coefficient: N-Octanol/Water</b>	: Not available
<b>Viscosity</b>	: Not available
<b>Viscosity, Kinematic</b>	: Not available



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- Explosive Properties** : Product is not explosive  
**Explosion Data – Sensitivity to Mechanical Impact** : Not expected to present an explosion hazard due to mechanical impact  
**Explosion Data – Sensitivity to Static Discharge** : Not expected to present an explosion hazard due to static discharge

## SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.  
**10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).  
**10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.  
**10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.  
**10.5. Incompatible Materials:** Strong oxidizing agents.  
**10.6. Hazardous Decomposition Products:** Not expected to form during normal storage.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified

**Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not classified

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Overexposure may be irritating to the respiratory system.

**Symptoms/Injuries After Skin Contact:** Repeated or prolonged skin contact may cause irritation.

**Symptoms/Injuries After Eye Contact:** Direct contact with the eyes is likely irritating.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** Not Classified

### 11.2. Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:** Not classified

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General:** Not available

### 12.2. Persistence and Degradability

Not available

### 12.3. Bioaccumulative Potential

Not available

### 12.4. Mobility in Soil

Not available

### 12.5. Other Adverse Effects

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS



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## 13.1. Waste treatment methods

**Sewage Disposal Recommendations:** Do not empty into drains; dispose of this material and its container in a safe way. Do not empty into drains. Do not dispose of waste into sewer.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

## SECTION 14: TRANSPORT INFORMATION

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

**14.4. In Accordance with TDG** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

SARA Section 311/312 Hazard Classes	Not classified
-------------------------------------	----------------

**15.2. US State Regulations:** Not regulated

**15.3. Canadian Regulations:** Not regulated

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 05/25/2015

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

H314	Causes severe skin burns and eye damage.
H302	Harmful if swallowed.
P273	Avoid release into the environment.
P501	Dispose of contents/container in accordance with local, regional, national, and international regulations.

### Party Responsible for the Preparation of This Document


CAM2 International, LLC  
683 Haining Road  
Vicksburg, MS 39183  
(800) 338-2262  
www.CAM2.com

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

North America GHS US 2012 & WHMIS 2



# SAFETY DATA SHEET

<b>Product Name:</b>	<b>PPE</b>			
Hitachi Hydraulic Oil Super EX 46HN				

Revision Date: 10-Apr-2015

Revision Number: 3

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### 1.1 Product Identifier

**Product Name:** Hitachi Hydraulic Oil Super EX 46HN

#### Other means of identification

**Product Code:** 3220-021A

**Synonyms:** Not available

### 1.2 Recommended use of the chemical and restrictions on use

**Recommended Use:** Hydraulic Oil

**Uses advised against:** No information available

### 1.3. Details of the supplier of the safety data sheet

**Manufactured by:** Idemitsu Lubricants America Corporation  
701 Port Rd.  
Jeffersonville, IN. 47130  
Telephone: 812-285-8234  
Fax: 812-285-8243  
Contact Name: Robin Hutchens  
Email: sds@ilacorp.com

**Manufactured for:** Deere & Company  
One John Deere Place  
Moline, IL 61265  
Telephone: 1-800-822-8262

**24 Hour Emergency Phone Number:** Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: + 1 703-741-5970 (collect calls accepted)



## 2. HAZARDS IDENTIFICATION

### 2.1 Classification

This material is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and WHMIS 2015

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 2 - Testes
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified
None	

### 2.2. Label elements



**Signal word**

**Hazard statements**

**Precautionary Statements - Prevention:**

**Precautionary Statements - Response:**

**Precautionary Statements - Storage:**

**Precautionary Statements - Disposal:**

**Hazards not otherwise classified (HNOC)**

**Warning**

H361 - Suspected of damaging fertility or the unborn child if swallowed

P201 - Obtain special instructions before use  
 P202 - Do not handle until all safety precautions have been read and understood  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

Not applicable

### 2.3 Other information

**Other hazards**

- May be harmful in contact with skin
- Harmful to aquatic life with long lasting effects

Unknown acute toxicity

1.95% of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

Not applicable

**3.2 Mixtures****Hazardous components**

Chemical Name	CAS-No	Weight %
Tricresylphosphate	1330-78-5	<1

**Non-Hazardous Components**

Chemical Name	CAS-No	Weight %
Mineral Base Stock	MIXTURE	95-99

**4. FIRST AID MEASURES****4.1 First Aid Measures**

<b>General Advice</b>	If symptoms persist, call a physician. Take a copy of the Safety Data Sheet when going for medical treatment.
<b>Eye Contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air in case of accidental inhalation of vapors. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician immediately.
<b>Ingestion</b>	Do not induce vomiting without medical advice. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Call a physician or Poison Control Center immediately.
<b>Protection of First-aiders</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

**4.2 Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	No information available.
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**4.3 Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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**5. FIRE-FIGHTING MEASURES****Flammable Properties**

NFPA: Class IIIB Combustible Liquid

**5.1 Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

**Unsuitable Extinguishing Media**

Do not use a solid water stream as it may scatter and spread fire.

**5.2 Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

**Hazardous combustion products:**

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and / or irritating. Combustion products may include and are not limited to, Carbon oxides, Nitrogen oxides (NOx), Oxides of Phosphorus.

**5.3 Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

Avoid contact with the skin and the eyes. Use personal protective equipment. Remove all sources of ignition. Avoid breathing vapors or mists. Ensure adequate ventilation.

**6.2 Environmental Precautions****Environmental Precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

**6.3 Methods and material for containment and cleaning up****Methods for Clean-up**

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

**Spill Management****LARGE SPILLS**

Eliminate sources of ignition. Prevent additional discharge of material if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 15 Regulatory Information) notify the National Response Center.

**WATER SPILLS**

Prevent liquid entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Recover by pumping or with suitable absorbent. If liquid is too viscous for pumping, scrape up. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

**7. HANDLING AND STORAGE****7.1. Precautions for safe handling****Handling**

Wear personal protective equipment. Do not breathe vapors or spray mist. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

**Safe Handling Advice**

Handle in accordance with good industrial hygiene and safety practices.

7.2. Conditions for safe storage, including any incompatibilities

<b>Storage</b>	Keep in properly labeled containers. Keep container tightly closed in a dry and well-ventilated place.
<b>Incompatible Materials and/or Coatings</b>	No information available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Other Exposure Guidelines (If Generated)**

Chemical Name	OSHA PEL	ACGIH TLV	ACGIH OEL (STEL)	NIOSHT REL TWA	ILA IHG	ILA ROEG	ILA Internal Exposure Limit
Oil mist, mineral	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>		TWA 5 mg/m <sup>3</sup> ST 10 mg/m <sup>3</sup>			

8.2. Exposure controls

**Appropriate engineering controls** Ensure adequate ventilation, especially in confined areas. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal Protective Equipment**

<b>Eye/face protection</b>	Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If splashes are likely to occur wear tight fitting safety goggles and/or face-shield.
<b>Skin protection</b>	Wear protective gloves/clothing. Choose the appropriate protective clothing / gloves based on the tasks being performed to avoid exposed skin surfaces. <b>Glove Type:</b> Neoprene, Nitriles.
<b>Respiratory protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
<b>General Hygiene Considerations</b>	When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

**9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Clear
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Physical State	Liquid
Odor	Mild
Odor Threshold	No information available
pH	Not applicable
Melting point / melting range	Not applicable
Boiling point / boiling range	No information available
Flash Point	244 °C / 471 °F COC ASTM D92
Evaporation Rate	No information available
Flammability Limit in Air	No information available
Explosion Limits	No information available
Vapor Pressure	No information available
Vapor Density (Air)	No information available
Density	0.86 g/cm <sup>3</sup> @15°C
Solubility	No information available
Partition Coefficient (n-octanol/water)	No information available
Autoignition Temperature	No information available
Decomposing Temperature	No information available
Viscosity	@ 40C = 49.00 cSt; @ 100C = 7.83 cSt

#### Other Information

DMSO extract by IP346 Less than 3.0 wt% (mineral oil component only)

### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity

Reactivity The product is chemically stable

#### 10.2 Chemical stability

Chemical Stability Stable under recommended storage conditions.

#### 10.3 Possibility of Hazardous Reactions

Possibility of Hazardous Reactions None under normal processing.

#### Hazardous Polymerization

Hazardous polymerisation does not occur.

#### 10.4 Conditions to Avoid

Conditions to Avoid Heat, flames and sparks.

#### 10.5 Incompatible Materials

Incompatible Materials Strong oxidizing agents.

#### 10.6 Hazardous Decomposition Products

Hazardous decomposition products Thermal decomposition can lead to release of irritating gases and vapors.

### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on likely routes of exposure

Inhalation	May cause irritation of respiratory tract.
Eye contact	May cause slight irritation.

**Skin Contact** May be harmful in contact with skin.

**Ingestion** May be harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tricresylphosphate 1330-78-5	3000 mg/kg (Rat)	1701 mg/kg (Rabbit)	

### 11.2 Information on toxicological effects

**Symptoms** No information available

### 11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Not classified.

**Serious eye damage/eye irritation** Not classified.

**Sensitization** Not classified.

**Mutagenic effects** Not classified.

### 11.4 Carcinogenicity

**Carcinogenicity** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, OSHA, or ACGIH.

#### **Legend:**

*NTP: (National Toxicity Program), ACGIH (American Conference of Governmental Industrial Hygienists) IARC: (International Agency for Research on Cancer), OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive Effects** Contains a known or suspected reproductive toxin.

**STOT - single exposure** Not classified.

**STOT - repeated exposure** Not classified

**Aspiration hazard** Not classified.

### 11.5 Acute Toxicity

**Unknown acute toxicity** 1.95% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

#### Product Information (Estimated):

ATEmix (oral) > 5,000 mg/kg  
ATEmix (dermal) > 2,000 mg/kg  
ATEmix (inhalation-dust/mist) > 5 mg/l

## **12. ECOLOGICAL INFORMATION**

### 12.1 Ecotoxicity

#### **Ecotoxicity effects**

Harmful to aquatic life with long lasting effects. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

**Unknown aquatic toxicity** 1.96% of the mixture consists of component(s) of unknown hazards to the aquatic environment

[12.2 Persistence and degradability](#) No information available.

[12.3 Bioaccumulation/Accumulation](#) No information available

[12.4. Mobility in soil](#) No information available

[PBT and vPvB assessment](#) No information available

[12.5 Other adverse effects:](#) No information available

### 13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

To minimize exposure, see Section 8 (Exposure Controls/Personal Protection) of the SDS.

**Waste Disposal Method** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging** Dispose of in accordance with local regulations.

### 14. TRANSPORT INFORMATION

**DOT** Not regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated

### 15. REGULATORY INFORMATION

#### International Inventories

<b>TSCA</b>	All ingredients are on the inventory or exempt from listing
<b>DSL</b>	All ingredients are on the inventory or exempt from listing
<b>NDSL</b>	Not Listed
<b>EINECS</b>	Does not comply
<b>ELINCS</b>	Not Listed
<b>ENCS</b>	Does not comply
<b>CHINA</b>	All ingredients are on the inventory or exempt from listing
<b>KECL</b>	All ingredients are on the inventory or exempt from listing

<b>PICCS</b>	All ingredients are on the inventory or exempt from listing
<b>AICS</b>	All ingredients are on the inventory or exempt from listing
<b>NZIoC</b>	Does not comply
<b>Mexico (INSQ)</b>	Does not comply

**USA****Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazardous Categorization**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**CERCLA/SARA 302 & 304**

Section 302 & 304 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 355.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any HAPs.

**State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

<b>Chemical Name</b>	<b>CAS-No</b>	<b>New Jersey</b>
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	X

**New Jersey Worker and Community Right-to-Know Act:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Hydraulic Oil)

**Canada**

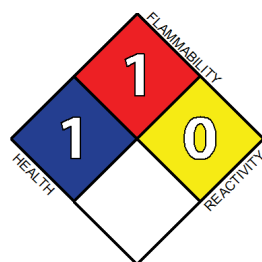
This material has been classified in accordance with the WHMIS 2015 regulation

<b>Chemical Name</b>	<b>CAS-No</b>	<b>Weight %</b>	<b>NPRI</b>
2,6-di-tert-butyl p-cresol	128-37-0	<1	Listed
distillates (petroleum), hydrotreated light	64742-47-8	<0.1	Listed
Diphenylamine	122-39-4	<0.001	Listed



## Legend

NPRI - National Pollutant Release Inventory

**16. OTHER INFORMATION**NFPA

Health: 1

Flammability: 1

Instability 0

**Prepared By**

Robin Hutchens

**Revision Date:**

10-Apr-2015

**Revision Summary:**

Reproductive toxic Cat. 2 (Repr. Cat. 2)  
SARA 311/312 Hazard change  
GHS SDS format  
Hazard Statements

**Disclaimer:**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

## SAFETY DATA SHEET

# Hydraulic Fluid

Date of Preparation: 05/20/2014

SDS #: 004-16144-00MSDS

### SECTION 1: IDENTIFICATION

**Product Identification:** Hydraulic fluid OD-15-200

**CAS Number:**

**Volumes:** 5 GAL, 1 L

**Other Designations:**

**Recommended Use:**

**Restrictions:** For industrial use only.

**Supplier Information:**

Micromeritics Instrument Corp.  
4356 Communications Drive  
Norcross, GA 30093-2901 USA

Contact: Human Resources  
Phone: (770) 662-3620  
Fax: (770) 662-3696

**Manufacturer:** Micromeritics Instrument Corp., 4356 Communications Drive, Norcross, GA 30093-1877 USA, Phone: (770) 662-3678 Sun Company, Inc., Ten Penn Center, 1801 Market St., Philadelphia, PA 19103-699

### SECTION 2: HAZARDS IDENTIFICATION

**GHS Classification:** Not Applicable

**Signal word:** Not Applicable

**Hazard Statement:** Not Applicable

**Pictograms:** Not Applicable

**Potential Health Effects**

**Primary Entry Routes:** Skin

**Target Organs:** Not Applicable

**Acute Effects**

**Inhalation:** No effects expected.

**Eye:** Contact with the eye may cause minimal irritation.

**Skin:** Practically non-toxic if absorbed (LD50 greater than 2000mg/Kg). May cause mild irritation with prolonged or repeated contact.

**Ingestion:** Practically non-toxic. (LD50> 15g/Kg)

**Carcinogenicity:** Not Applicable

**Medical Conditions Aggravated by Long-Term Exposure:** Not Applicable

**Chronic Effects:** Not Applicable

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	% wt
Severely Solvent Refined Heavy Paraffinic Petroleum Oil	64741-88-4	90.00-100.00
Zinc Dialkyl Dithiophosphate	68649-42-3	1.00
Calcium Sulfonate	61789-86-4	1.00
Butylated Phenol	Not Applicable	1.00
Acrylic Copolymer	68171-46-0	1.00
2-Ethylhexanol	104-76-7	1.00

### Trace Impurities:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Hydraulic Oil	5 mg/m <sup>3</sup>	none estab.	5 mg/m <sup>3</sup>	none estab.	none estab.	none estab.	none estab.
Oil Mist	5 mg/m <sup>3</sup>	none estab.	5 mg/m <sup>3</sup>	none estab.	none estab.	none estab.	none estab.

## SECTION 4: FIRST-AID MEASURES

**Inhalation:** Move person to fresh air.

**Eye Contact:** Flush with water.

**Skin Contact:** Wash with soap and water until no odor remains. Wash clothing before reuse.

**Ingestion:** Practically non-toxic. Induction of vomiting not required. Obtain emergency medical attention.

Small amounts which accidentally enter mouth should be rinsed out until taste of it is gone.

**Note to Physicians:** Not Applicable

**Special Precautions/Procedures: Warning!!** *High pressure injection of oil through the skin is a medical emergency. There may be no sign of injury and no initial pain. This oil must be removed completely by a physician. Failure to obtain immediate treatment has resulted in loss of a finger, hand or arm. WHMIS Classification: Not controlled.*

## SECTION 5: FIRE-FIGHTING MEASURES

**Flammability Classification:** Not Applicable

**Extinguishing Media:** Water spray, regular foam, dry chemical, carbon dioxide.

**Unusual Fire or Explosion Hazards:** Not Applicable

**Hazardous Combustion Products:** Not Applicable

**Fire-Fighting Instructions:** Wear self-contained breathing apparatus. Wear structural firefighter's protective clothing.

**Fire-Fighting Equipment:** Not Applicable

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Small Spills:

Wear protective equipment to prevent skin and eye contamination. Avoid inhalation of vapors. Wipe up with absorbent (clean rag or paper towels). Collect and seal in properly labelled containers or drums for disposal.

### Large Spills:

Prevent further leakage or spillage if safe to do so. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapors. Work up wind or increase ventilation. Prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

**Regulatory Requirements:** Not Applicable

## SECTION 7: HANDLING AND STORAGE

**Handling Precautions:** Avoid eye contact and repeated or prolonged skin contact.

**Storage Requirements:** Store in a cool, dry, well-ventilated place and out of direct sunlight.

**Regulatory Requirements:** Not Applicable

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Natural ventilation should be adequate under normal use conditions. Keep containers closed when not in use.

**Ventilation:** Not Applicable

**Administrative Controls:** Not Applicable

**Respiratory Protection:** Not Applicable

**Protective Clothing/Equipment:** Safety shoes, safety glasses, gloves

**Safety Stations:** Not Applicable

**Contaminated Equipment:** Not Applicable

**Comments:** Not Applicable

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**Flash Point:** 380 minimum COC °: (192 min. OC°C)

**Flash Point Method:** COC

**Burning Rate:** Not Applicable

**Autoignition Temperature:** Not Applicable

**LEL:** Not Applicable

**UEL:** Not Applicable

**Physical State:** Not Applicable

**Water Solubility:** NIL (% by volume)

**Appearance and Odor:** Clear fluid, little odor.

**Other Solubilities:** Not Applicable

**Odor Threshold:** Not Applicable

**Vapor Pressure:** <0.0001 mmHg at 20°C

**Vapor Density (Air=1):** 10+

**Formula Weight:** Not Applicable

**Density:** Not Applicable

**Specific Gravity (H<sub>2</sub>O=1):** 0.87

**pH:** Not Applicable

**Boiling Point:** Not Applicable

**Freezing/Melting Point:** Not Applicable

**Viscosity:** 165 SUS @ 100°F 32.0 CST @ 40°C

**Refractive Index:** Not Applicable

**Surface Tension:** Not Applicable

**% Volatile:** Not Applicable

**Evaporation Rate:** 1000X slower (Ethyl Ether =1)

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable

**Polymerization:** Will not occur

**Chemical Incompatibilities:** Strong Oxidizers

**Conditions to Avoid:** Elevated temperatures and sources of ignition

**Hazardous Decomposition Products:** Combustion produces carbon monoxide, oxides of sulfur and asphyxiates.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Eye Effects:** Not Applicable

**Skin Effects:** Not Applicable

**Acute Inhalation Effects:** Not Applicable

**Acute Oral Effects:** Not Applicable

**Chronic Effects:** Not Applicable

**Carcinogenicity:** Not Applicable

**Mutagenicity:** Not Applicable

**Teratogenicity:** Not Applicable

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Not Available

**Environmental Fate:** Not Available

**Environmental Degradation:** Not Available

**Soil Absorption/Mobility:** Not Available

## SECTION 13: DISPOSAL CONSIDERATIONS

**Disposal:** Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see “Section 8. Exposure Controls and Personal Protection” of this SDS. If possible material and its container should be recycled.

**Disposal Regulatory Requirements:** Not Available

**Container Cleaning and Disposal:** Not Available

## SECTION 14: TRANSPORT INFORMATION

**DOT Transportation Data (49 CFR 172.101):**

**Shipping Name:** Not regulated

**Shipping Symbols:** Not Applicable

**Hazard Class:** Not regulated

**ID No.:** Not regulated

**Packing Group:** Not Applicable

**Label:** Not Applicable

**Special Provisions (172.102):**

Not Applicable

**Packaging Authorizations**

a) **Exceptions:** Not Applicable

b) **Non-bulk Packaging:** Not Applicable

c) **Bulk Packaging:** Not Applicable

**Quantity Limitations**

a) **Passenger, Aircraft, or Railcar:** Not Applicable

b) **Cargo Aircraft Only:** Not Applicable

**Vessel Stowage Requirements**

a) **Vessel Stowage:** Not Applicable

b) **Other:** Not Applicable

Canadian TDG Hazard Class & PIN – Not regulated

## SECTION 15: REGULATORY INFORMATION

**EPA Regulations:** Not Applicable

**OSHA Regulations:** Not Applicable

**State Regulations:** Not Applicable

## SECTION 16: OTHER INFORMATION

**Prepared By:** Zuniga, A.

**Revision Notes:** Not Applicable

**Additional Hazard Rating Systems:** Not Applicable

**Disclaimer:** The information presented herein is believed to be accurate and was obtained from sources believed to be reliable. However, the information is provided without any representation or warranty, expressed or implied, with respect to its accuracy or completeness. It is the users' responsibility to determine the suitability of this product and the relevance of this information for their use.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** INSTA-VIS™ PLUS

**Other means of identification** None.

**Recommended use** Not available.

**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

#### Manufacturer

**Company name** CETCO, an MTI Company

**Address** 2870 Forbs Avenue  
Hoffman Estates, IL 60192  
United States

**Telephone** General Information 800 527-9948

**Website** <http://www.cetco.com/>

**E-mail** [safetydata@amcol.com](mailto:safetydata@amcol.com)

**Emergency phone number** .

**Americas** 1.866.519.4752 (US, Canada, Mexico) 1 760 476 3962 Access Code 333562

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

#### Label elements

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** The mixture does not meet the criteria for classification.

#### Precautionary statement

**Prevention** Not available.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Petroleum distillates, hydrotreated light		64742-47-8	30 - < 40
Alcohols, C11-14-iso-, C13-rich, Ethoxylated		78330-21-9	1 - < 3
Other components below reportable levels			60 - < 70

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

**Inhalation** If gas/fume/vapor/dust/mist from the material is inhaled, remove the affected person immediately to fresh air.



<b>Skin contact</b>	Immediately flush skin with running water for at least 20 minutes. Launder contaminated clothing before reuse.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. No need for first aid is anticipated if material is swallowed. Product is not considered toxic in small amounts.
<b>Most important symptoms/effects, acute and delayed</b>	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Powder. Alcohol resistant foam. Dry chemical, CO <sub>2</sub> , water spray or regular foam. Dry chemicals.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Material can be slippery when wet
<b>Fire fighting equipment/instructions</b>	Cool containers exposed to heat with water spray and remove container, if no risk is involved.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Combustible. No unusual fire or explosion hazards noted.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. Material can be slippery when wet. Forms smooth, slippery surfaces on floors, posing an accident risk.
<b>Methods and materials for containment and cleaning up</b>	Large Spills: Stop the flow of material, if this is without risk. Use water spray to reduce vapors or divert vapor cloud drift. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Following product recovery, flush area with water.  Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
<b>Environmental precautions</b>	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not flush into surface water or sanitary sewer system.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Do not get this material in your eyes, on your skin, or on your clothing. Avoid prolonged or repeated contact with skin. Use only in well-ventilated areas. Avoid release to the environment. Forms smooth, slippery surfaces on floors, posing an accident risk.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep at temperatures between 0 and 30°C. Keep away from heat and sources of ignition. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS). Do not freeze.

## 8. Exposure controls/personal protection

<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Ensure adequate ventilation, especially in confined areas. Ventilation should effectively remove and prevent buildup of any vapor/mist/fume/dust generated from the handling of this product.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Goggles.

<b>Skin protection</b>	
<b>Hand protection</b>	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.
<b>Other</b>	Wear oil-impervious garments if contact is unavoidable. Normal work clothing (long sleeved shirts and long pants) is recommended. Use impervious gloves.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment. If mist is generated (heating, spraying) and engineering controls are not sufficient, wear approved organic vapor respirator suitable for oil mist.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Use good industrial hygiene practices in handling this material. Eye wash fountain and emergency showers are recommended.

## 9. Physical and chemical properties

<b>Appearance</b>	Viscous.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	White. Milky.
<b>Odor</b>	Aliphatic.
<b>Odor threshold</b>	Not available.
<b>pH</b>	6 - 8 6 - 8
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available.
<b>Flash point</b>	> 212.0 °F (> 100.0 °C)
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	> 392 °F (> 200 °C)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Combustible IIIB estimated
<b>Flash point class</b>	Combustible IIIB
<b>Oxidizing properties</b>	Not oxidizing.
<b>VOC (Weight %)</b>	CARB

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
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<b>Chemical stability</b>	Stable at normal conditions.
<b>Possibility of hazardous reactions</b>	Will not occur.
<b>Conditions to avoid</b>	None known. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

Components	Species	Test Results
Petroleum distillates, hydrotreated light (CAS 64742-47-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	2000.0001 mg/kg
<b>Inhalation</b>		
LC50	Rat	5.2001 mg/l/4h
<b>Oral</b>		
LD50	Rat	5000.0001 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Direct contact with eyes may cause temporary irritation.

### Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. This product contains trace levels (<0.1%) of a potential carcinogen.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not an aspiration hazard.

## 12. Ecological information

**Ecotoxicity** Not readily biodegradable ( 40 % after 28 days).

Components	Species	Test Results
Petroleum distillates, hydrotreated light (CAS 64742-47-8)		
<b>Aquatic</b>		
Fish	LC50 Fish	45 mg/L, 96 Hours

Components	Species	Test Results
	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.9 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	No data available.
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

### 15. Regulatory information

**US federal regulations** OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.  
This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**  
Not regulated.

#### Other federal regulations

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**  
Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations** WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

<b>Issue date</b>	18-November-2013
<b>Revision date</b>	01-July-2015
<b>Version #</b>	10
<b>Further information</b>	This safety datasheet only contains information relating to safety and does not replace any product information or product specification. HMIS® is a registered trade and service mark of the NPCA.
<b>HMIS® ratings</b>	Health: 2 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 2 Flammability: 0 Instability: 0

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. CETCO - Drilling Products Group cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

**Revision Information**

This document has undergone significant changes and should be reviewed in its entirety.

# Material Safety Data Sheet

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

### John Deere Hy-Gard™ Low Vis Transmission/Hydraulic Oil

**Product Use:** Transmission Fluid, Hydraulic Oil

**Product Number(s):** CPS240216

**Company Identification**

Chevron Products Company

Global Lubricants

6001 Bollinger Canyon Rd.

San Ramon, CA 94583

United States of America

chevron-lubricants

**Transportation Emergency Response**

CHEMTREC: (800) 424-9300 or (703) 527-3887

**Health Emergency**

Chevron Emergency Information Center: Located in the USA. International collect calls accepted. (800) 231-0623 or (510) 231-0623

**Product Information**

email : lubemsds@chevrontexaco.com

## SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENTS	CAS NUMBER	AMOUNT
Highly refined mineral oil (C15 - C50)	Mixture	80 - 100 %weight
Zinc alkyl dithiophosphate	68649-42-3	1 - 5 %weight

## SECTION 3 HAZARDS IDENTIFICATION

**IMMEDIATE HEALTH EFFECTS**

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin. High-Pressure Equipment Information: Accidental high-velocity injection under the skin of materials of this type may result in serious injury. Seek medical attention at once should an accident like this occur. The initial wound at the injection site may not appear to be serious at first; but, if left untreated, could result in disfigurement or amputation of the affected part.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.

## SECTION 4 FIRST AID MEASURES

**Eye:** No specific first aid measures are required. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** No specific first aid measures are required. As a precaution, remove clothing and shoes if contaminated. To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** No specific first aid measures are required. Do not induce vomiting. As a precaution, get medical advice.

**Inhalation:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

**Note to Physicians:** In an accident involving high-pressure equipment, this product may be injected under the skin. Such an accident may result in a small, sometimes bloodless, puncture wound. However, because of its driving force, material injected into a fingertip can be deposited into the palm of the hand. Within 24 hours, there is usually a great deal of swelling, discoloration, and intense throbbing pain. Immediate treatment at a surgical emergency center is recommended.

## SECTION 5 FIRE FIGHTING MEASURES

Leaks/ruptures in high pressure system using materials of this type can create a fire hazard when in the vicinity of ignition sources (eg. open flame, pilot lights, sparks, or electric arcs).

### FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0

### FLAMMABLE PROPERTIES:

**Flashpoint:** (Cleveland Open Cup) 150 °C (302 °F) (Min)

**Autoignition:** No Data Available

**Flammability (Explosive) Limits (% by volume in air):** Lower: Not Applicable Upper: Not Applicable

**EXTINGUISHING MEDIA:** Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

### PROTECTION OF FIRE FIGHTERS:

**Fire Fighting Instructions:** This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**Protective Measures:** Eliminate all sources of ignition in vicinity of spilled material.

**Spill Management:** Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

**Reporting:** Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

## SECTION 7 HANDLING AND STORAGE



**Precautionary Measures:** DO NOT USE IN HIGH PRESSURE SYSTEMS in the vicinity of flames, sparks and hot surfaces. Use only in well ventilated areas. Keep container closed.

Keep out of the reach of children.

**General Handling Information:** Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

**Static Hazard:** Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, 'Flammable and Combustible Liquids', National Fire Protection Association (NFPA 77, 'Recommended Practice on Static Electricity', and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents'.

**Container Warnings:** Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

### ENGINEERING CONTROLS:

Use in a well-ventilated area.

### PERSONAL PROTECTIVE EQUIPMENT

**Eye/Face Protection:** No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice.

**Skin Protection:** No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace. Suggested materials for protective gloves include: Nitrile Rubber, Silver Shield, Viton.

**Respiratory Protection:** No respiratory protection is normally required.

If user operations generate an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from the measured concentrations of this material. For air-purifying respirators use a particulate cartridge.

Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

### Occupational Exposure Limits:

Component	Agency	TWA	STEL	Ceiling	Notation
Highly refined mineral oil (C15 - C50)	ACGIH	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	--	--
Highly refined mineral oil (C15 - C50)	OSHA Z-1	5 mg/m <sup>3</sup>	--	--	--

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

**Color:** Colorless to yellow

**Physical State:** Liquid  
**Odor:** Petroleum odor  
**pH:** Not Applicable  
**Vapor Pressure:** <0.01 mmHg @ 37.8 °C (100 °F)  
**Vapor Density (Air = 1):** >1  
**Boiling Point:** >260°C (500°F)  
**Solubility:** Soluble in hydrocarbons; insoluble in water  
**Freezing Point:** Not Applicable  
**Specific Gravity:** 0.87 - 0.88 @ 15.6°C (60.1°F) / 15.6°C (60.1°F)  
**Viscosity:** 7 cSt @ 100°C (212°F) (Min)

## SECTION 10 STABILITY AND REACTIVITY

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Incompatibility With Other Materials:** May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

**Hazardous Decomposition Products:** None known (None expected)

**Hazardous Polymerization:** Hazardous polymerization will not occur.

## SECTION 11 TOXICOLOGICAL INFORMATION

### IMMEDIATE HEALTH EFFECTS

**Eye Irritation:** The eye irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Irritation:** The skin irritation hazard is based on evaluation of data for similar materials or product components.

**Skin Sensitization:** No product toxicology data available.

**Acute Dermal Toxicity:** The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Oral Toxicity:** The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.

**Acute Inhalation Toxicity:** The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.

### ADDITIONAL TOXICOLOGY INFORMATION:

This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, severe hydrocracking, or severe hydrotreating. None of the oils requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as: carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

## SECTION 12 ECOLOGICAL INFORMATION

### ECOTOXICITY

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

### ENVIRONMENTAL FATE

This material is not expected to be readily biodegradable.

## SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

## SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

**DOT Shipping Description:** PETROLEUM LUBRICATING OIL, NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

**Additional Information:** NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

**IMO/IMDG Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

**ICAO/IATA Shipping Description:** PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

## SECTION 15 REGULATORY INFORMATION

**EPCRA 311/312 CATEGORIES:** 1. Immediate (Acute) Health Effects: NO  
 2. Delayed (Chronic) Health Effects: NO  
 3. Fire Hazard: NO  
 4. Sudden Release of Pressure Hazard: NO  
 5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

01-1=IARC Group 1	03=EPCRA 313
01-2A=IARC Group 2A	04=CA Proposition 65
01-2B=IARC Group 2B	05=MA RTK
02=NTP Carcinogen	06=NJ RTK
	07=PA RTK

The following components of this material are found on the regulatory lists indicated.

Zinc alkyl dithiophosphate 03, 06

### CHEMICAL INVENTORIES:

All components comply with the following chemical inventory requirements: AICS (Australia), DSL (Canada), EINECS (European Union), ENCS (Japan), KECI (Korea), TSCA (United States).

One or more components does not comply with the following chemical inventory requirements: IECSC (China), PICCS (Philippines).

**NEW JERSEY RTK CLASSIFICATION:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Automatic transmission fluid)

**WHMIS CLASSIFICATION:**

This product is not considered a controlled product according to the criteria of the Canadian Controlled Products Regulations.

**SECTION 16 OTHER INFORMATION**

**NFPA RATINGS:** Health: 0 Flammability: 1 Reactivity: 0

**HMIS RATINGS:** Health: 1 Flammability: 1 Reactivity: 0

(0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*-Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**LABEL RECOMMENDATION:**

Label Category : INDUSTRIAL OIL 1 - IND1

**REVISION STATEMENT:** This is a new Material Safety Data Sheet.

**Revision Date:** February 03, 2007

**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:**

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	PEL - Permissible Exposure Limit
	CAS - Chemical Abstract Service Number
ACGIH - American Conference of Government Industrial Hygienists	IMO/IMDG - International Maritime Dangerous Goods Code
API - American Petroleum Institute	MSDS - Material Safety Data Sheet
CVX - Chevron	NFPA - National Fire Protection Association (USA)
DOT - Department of Transportation (USA)	NTP - National Toxicology Program (USA)
IARC - International Agency for Research on Cancer	OSHA - Occupational Safety and Health Administration

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Chevron Energy Technology Company, 100 Chevron Way, Richmond, California 94802.

**The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.**



# JOHNSEN'S PREMIUM PAG 100 8 FL.OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 09/19/2014

Version:

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Substance  
Trade name : JOHNSEN'S PREMIUM PAG 100 8 FL.OZ.  
CAS No : Proprietary  
Product code : 6816-6

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Lubricant

#### 1.3. Details of the supplier of the safety data sheet

Technical Chemical Company  
P.O. BOX 139  
Cleburne, Texas 76033  
T 817-645-6088

#### 1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300, 1-703-527-3887 (International)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification (GHS-US)

Acute Tox. 4 (Oral) H302

Full text of H-phrases: see section 16

#### 2.2. Label elements

##### GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning  
Hazard statements (GHS-US) : H302 - Harmful if swallowed  
Precautionary statements (GHS-US) : P264 - Wash affected areas thoroughly after handling  
P270 - Do not eat, drink or smoke when using this product  
P301+P312 - If swallowed: Call a poison center, doctor if you feel unwell  
P330 - Rinse mouth  
P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

#### 2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name : Polyalkylene Glycol Alkyl Ether 100  
CAS No : Proprietary

Name	Product identifier	%	Classification (GHS-US)
Polyalkylene Glycol Alkyl Ether 100 (Main constituent)	(CAS No) Proprietary	100	Acute Tox. 4 (Oral), H302

Full text of H-phrases: see section 16

#### 3.2. Mixture

Not applicable

# JOHNSEN'S PREMIUM PAG 100 8 FL.OZ.

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Assure fresh air breathing. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER/doctor/physician if you feel unwell.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: If you feel unwell, seek medical advice. Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/injuries after inhalation	: May cause irritation or asthma-like symptoms.
Symptoms/injuries after skin contact	: May cause slight irritation . Itching. Red skin.
Symptoms/injuries after eye contact	: Inflammation/damage of the eye tissue. May cause slight eye irritation . Redness of the eye tissue.
Symptoms/injuries after ingestion	: May be harmful if swallowed and enters airways. Swallowing a small quantity of this material will result in serious health hazard.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Remove ignition sources.
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##### 6.1.1. For non-emergency personnel

Protective equipment	: Gloves. Safety glasses.
Emergency procedures	: Evacuate unnecessary personnel.

##### 6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

For containment	: Dam up the liquid spill. Plug the leak, cut off the supply. Contain released substance, pump into suitable containers.
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
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Hygiene measures : Do not eat, drink or smoke when using this product. Wash affected areas thoroughly after handling. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed. Comply with applicable regulations.  
Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.  
Incompatible products : Strong bases. Strong acids.  
Incompatible materials : Sources of ignition. Direct sunlight.

### 7.3. Specific end use(s)

Follow Label Directions.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

Appropriate engineering controls : Local exhaust ventilation, vent hoods.  
Personal protective equipment : Gloves. Safety glasses. Avoid all unnecessary exposure.



Hand protection : Wear protective gloves.  
Eye protection : Chemical goggles or safety glasses.  
Skin and body protection : Wear suitable protective clothing.  
Respiratory protection : Wear appropriate mask.  
Other information : Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid  
Appearance : Liquid.  
Color : Colourless to light yellow.  
Odor : Characteristic. Mild.  
Odor threshold : No data available  
pH : No data available  
Relative evaporation rate (butyl acetate=1) : No data available  
Melting point : No data available  
Freezing point : No data available  
Boiling point : Decomposes before boiling  
Flash point : > 200 °C  
Auto-ignition temperature : No data available  
Decomposition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapor pressure : No data available  
Relative vapor density at 20 °C : No data available  
Relative density : 1 @ 20 deg C  
Specific gravity / density : 1 g/cm<sup>3</sup>  
Solubility : Moderately soluble in water.  
Log Pow : No data available  
Log Kow : No data available  
Viscosity, kinematic : 98 mm<sup>2</sup>/s @ 40 deg C  
Viscosity, dynamic : No data available  
Explosive properties : No data available  
Oxidizing properties : No data available  
Explosive limits : No data available

# JOHNSEN'S PREMIUM PAG 100 8 FL.OZ.

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### 9.2. Other information

VOC content : 0 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Harmful if swallowed.

JOHNSEN'S PREMIUM PAG 100 8 FL.OZ. ( V )Proprietary	
LD50 oral rat	500 mg/kg
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed.
Symptoms/injuries after inhalation	: May cause irritation or asthma-like symptoms.
Symptoms/injuries after skin contact	: May cause slight irritation . Itching. Red skin.
Symptoms/injuries after eye contact	: Inflammation/damage of the eye tissue. May cause slight eye irritation . Redness of the eye tissue.
Symptoms/injuries after ingestion	: May be harmful if swallowed and enters airways. Swallowing a small quantity of this material will result in serious health hazard.

## SECTION 12: Ecological information

### 12.1. Toxicity

No additional information available

### 12.2. Persistence and degradability

JOHNSEN'S PREMIUM PAG 100 8 FL.OZ. (Proprietary)	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

JOHNSEN'S PREMIUM PAG 100 8 FL.OZ. (Proprietary)	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

Other information : Avoid release to the environment.



# JOHNSEN'S PREMIUM PAG 100 8 FL.OZ.

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Ecology - waste materials : Avoid release to the environment.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): Not regulated,  
ICAO/IATA (air): Not regulated,  
IMO/IMDG (water): Not regulated,

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated

#### 14.3. Additional information

Other information : No supplementary information available.

#### Overland transport

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### JOHNSEN'S PREMIUM PAG 100 8 FL.OZ. (Proprietary)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
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#### 15.2. International regulations

##### CANADA

##### JOHNSEN'S PREMIUM PAG 100 8 FL.OZ. (Proprietary)

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

##### JOHNSEN'S PREMIUM PAG 100 8 FL.OZ. (Proprietary)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xn; R22

Full text of R-phrases: see section 16

#### 15.2.2. National regulations

##### JOHNSEN'S PREMIUM PAG 100 8 FL.OZ. (Proprietary)

Listed on KECI (Korean Existing Chemicals Inventory)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

#### 15.3. US State regulations

##### JOHNSEN'S PREMIUM PAG 100 8 FL.OZ. (Proprietary)

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List
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### JOHNSEN'S PREMIUM PAG 100 8 FL.OZ. (Proprietary)

Connecticut Right to Know  
Florida Right to Know  
Illinois Right to Know  
Louisiana Right to Know  
Michigan Right to Know

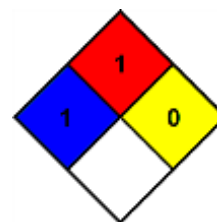
### SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
H302	Harmful if swallowed

NFPA health hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.  
NFPA fire hazard : 1 - Must be preheated before ignition can occur.  
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

Health : 1 Slight Hazard - Irritation or minor reversible injury possible  
Flammability : 1 Slight Hazard  
Physical : 0 Minimal Hazard  
Personal Protection : B

SDS US (GHS HazCom 2012) - TCC

*The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product*

*Disclaimer: The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.*



# SAFETY DATA SHEET

Issuing Date 29-Oct-2014

Revision Date 29-Oct-2014

Revision Number 0

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### GHS product identifier

Product Name KOPR KOTE®

### Other means of identification

Product Code(s) 105

Synonyms None

### Recommended use of the chemical and restrictions on use

Recommended Use Lubricants, Greases and Release Products

Uses advised against No information available

### Supplier's details

#### **Manufacturer Address**

Jet-Lube, Inc.  
4849 Homestead Rd.  
Suite 232  
Houston, Texas 77028  
TEL: 713-670-5700 (7:00 a.m. - 5:00 p.m.)

### Emergency telephone number

Emergency Telephone Number CHEMTREC: +1-703-527-3887 (INTERNATIONAL)  
1-800-424-9300 (NORTH AMERICA)

## 2. HAZARDS IDENTIFICATION

### Classification

This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2

### GHS Label elements, including precautionary statements

#### Emergency Overview

<b>Signal Word</b> <b>Hazard Statements</b> • Causes skin irritation • Causes serious eye irritation	<b>Warning</b>
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**Appearance** Copper, Bronze**Physical State** Semi-fluid (gel).**Odor** Petroleum like**Precautionary Statements****Prevention**

- Wash face, hands and any exposed skin thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.

**General Advice**

- Specific treatment is urgent (see supplemental first aid instructions on this label)

**Eyes**

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

**Skin**

- IF ON SKIN: Wash with plenty of soap and water.
- If skin irritation occurs: Get medical advice/attention.
- Take off contaminated clothing and wash before reuse.

**Storage**

- None

**Disposal**

- None

**Hazard Not Otherwise Classified (HNOC)**

Not applicable

**Other information**

20% of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %	Trade secret
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.	74869-21-9	50-70	*
Graphite	7782-42-5	10-15	*
Copper	7440-50-8	8-13	*
Talc	14807-96-6	1-5	*
Limestone	1317-65-3	1-5	*
Molybdenum (IV) sulfide	1317-33-5	1-5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of necessary first-aid measures**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Drink plenty of water. Do not induce vomiting without medical advice. Clean mouth with water and afterwards drink plenty of water. If symptoms persist, call a physician.

**Most important symptoms/effects, acute and delayed**

**Most Important Symptoms/Effects** No information available.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to Physician** Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. Dry powder. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

**Specific Hazards Arising from the Chemical**

Burning produces obnoxious and toxic fumes. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Heavy metal compounds

**Explosion Data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Use personal protective equipment.

**Environmental Precautions**

**Environmental Precautions** Do not allow material to contaminate ground water system. Prevent product from entering drains. See Section 12 for additional Ecological Information.

**Methods and materials for containment and cleaning up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Handling** Wear personal protective equipment. Ensure adequate ventilation.

**Conditions for safe storage, including any incompatibilities**

<b>Storage</b>	Keep container tightly closed in a dry and well-ventilated place. Keep in a banded area
<b>Incompatible Products</b>	Strong oxidizing agents. Acetylene. Vinyl compounds.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Graphite 7782-42-5	-	TWA: 15 mg/m <sup>3</sup> total dust synthetic TWA: 5 mg/m <sup>3</sup> total dust synthetic (vacated) TWA: 2.5 mg/m <sup>3</sup> respirable dust natural (vacated) TWA: 10 mg/m <sup>3</sup> total dust synthetic (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup> respirable dust
Copper 7440-50-8	TWA: 0.2 mg/m <sup>3</sup> fume	TWA: 0.1 mg/m <sup>3</sup> fume TWA: 1 mg/m <sup>3</sup> dust and mist (vacated) TWA: 0.1 mg/m <sup>3</sup> Cu dust, fume, mist	IDLH: 100 mg/m <sup>3</sup> dust, fume and mist TWA: 1 mg/m <sup>3</sup> dust and mist TWA: 0.1 mg/m <sup>3</sup> fume
Talc 14807-96-6	TWA: 2 mg/m <sup>3</sup>	(vacated) TWA: 2 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> containing no asbestos and <1% quartz TWA: 2 mg/m <sup>3</sup>
Limestone 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 15 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> respirable dust TWA: 10 mg/m <sup>3</sup> total dust
Molybdenum (IV) sulfide 1317-33-5	TWA: 10 mg/m <sup>3</sup> Mo inhalable fraction TWA: 3 mg/m <sup>3</sup> Mo respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> Mo	IDLH: 5000 mg/m <sup>3</sup> Mo

*Immediately Dangerous to Life or Health. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. NIOSH IDLH:*

**Other Exposure Guidelines** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Measures** Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Safety glasses with side-shields. Risk of contact, wear: Goggles.  
**Skin and Body Protection** Impervious clothing. Impervious gloves.  
**Respiratory Protection** None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

**Hygiene Measures** When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

Physical State	Semi-fluid (gel)	Appearance	Copper Bronze
Odor	Petroleum like	Odor Threshold	No information available
<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>	
pH	Neutral	None known	
Melting Point/Range	> 232 °C	None known	
Boiling Point/Boiling Range	< 316 °C	None known	
Flash Point	> 221 °C	None known	
Evaporation rate	<0.01	None known	
Flammability (solid, gas)	No data available	None known	
Flammability Limits in Air			
upper flammability limit	No data available		
lower flammability limit	No data available		
Vapor Pressure	<0.01 kPa @ 20°C	None known	
Vapor Density	>5 (air = 1)	None known	
Specific Gravity	1.15	None known	
Water Solubility	Insoluble in water.	None known	
Solubility in other solvents	Largely.	None known	
Partition coefficient: n-octanol/water	No data available	None known	
Autoignition Temperature	> 260 °C / >500 °F	None known	
Decomposition Temperature	No data available	None known	
Viscosity	No data available	None known	
Flammable Properties	Not flammable		
Explosive Properties	No data available		
Oxidizing Properties	No data available		
<b><u>Other information</u></b>			
VOC Content (%)	None		
VOC (g/l)	None		

## 10. STABILITY AND REACTIVITY

### **Reactivity**

No data available.

### **Chemical stability**

Stable under recommended storage conditions.

### **Possibility of hazardous reactions**

None under normal processing.

### **Hazardous Polymerization**

Hazardous polymerization does not occur.

### **Conditions to avoid**

Incompatible products.

### **Incompatible materials**

Strong oxidizing agents. Acetylene. Vinyl compounds.

### **Hazardous decomposition products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

<b>Inhalation</b>	None known.
<b>Eye Contact</b>	Causes serious eye irritation.
<b>Skin Contact</b>	Causes skin irritation.
<b>Ingestion</b>	Not an expected route of exposure. May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc.	= 2280 mg/kg ( Rat )	-	-

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** No information available.

**Delayed and immediate effects and also chronic effects from short and long term exposure**

<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Carcinogenicity</b>	Contains no ingredients above reportable quantities listed as a carcinogen.
<b>Reproductive Toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration Hazard</b>	No information available.

**Numerical measures of toxicity - Product**

**Acute Toxicity** 20% of the mixture consists of ingredient(s) of unknown toxicity.

*The following values are calculated based on chapter 3.1 of the GHS document:*

**LD50 Oral** 2606 mg/kg; Acute toxicity estimate

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Aquatic toxicity is unlikely due to low solubility. Based on available data, the classification criteria are not met

Lc50/48h/Acartia tonsa = >1000 mg/L EC50/72h/Skeletonema costatum = >1000 mg/L LC50/96h/Scophthalmus maximus = >1000 mg/L

Sea sediment LC50/10d/Corophium sp. = 925-3502 mg/kg

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Lubricating greases A complex combination of hydrocarbons having carbon numbers predominantly in the range of C12 through C50. may contain organic salts of alkali metals, alkaline earth metals, etc. 74869-21-9	>1001 mg/l	LC50 96 h: > 2000 mg/L (Salmo gairdneri)		



<p>Copper 7440-50-8</p>	<p>EC50 96 h: 0.031 - 0.054 mg/L static (Pseudokirchneriella subcapitata) EC50 72 h: 0.0426 - 0.0535 mg/L static (Pseudokirchneriella subcapitata)</p>	<p>LC50 96 h: 0.0068 - 0.0156 mg/L (Pimephales promelas) LC50 96 h: &lt; 0.3 mg/L static (Pimephales promelas) LC50 96 h: = 0.052 mg/L flow-through (Oncorhynchus mykiss) LC50 96 h: = 0.112 mg/L flow-through (Poecilia reticulata) LC50 96 h: = 0.2 mg/L flow-through (Pimephales promelas) LC50 96 h: = 0.3 mg/L semi-static (Cyprinus carpio) LC50 96 h: = 0.8 mg/L static (Cyprinus carpio) LC50 96 h: = 1.25 mg/L static (Lepomis macrochirus)</p>	<p>-</p>	<p>EC50 48 h: = 0.03 mg/L Static (Daphnia magna)</p>
<p>Talc 14807-96-6</p>		<p>LC50 96 h: &gt; 100 g/L semi-static (Brachydanio rerio)</p>		

**Persistence and Degradability** No information available.

**Bioaccumulation** No information available.

**Other Adverse Effects**

No information available.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Methods** Dispose of in accordance with federal, state, and local regulations Where possible recycling is preferred to disposal or incineration.

**Contaminated Packaging** Do not re-use empty containers.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Copper	Toxic

**14. TRANSPORT INFORMATION**

**DOT** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**U.S. Federal Regulations**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Copper	7440-50-8	8-13	1.0

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**Clean Water Act**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Copper		X	X	

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Copper	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**U.S. State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

"X" designates that the ingredients are listed on the state right to know list.

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Graphite	X	X	X		X
Copper	X	X	X	X	X
Talc	X	X	X		X
Limestone	X	X	X		X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION**

<b>NFPA</b>	Health Hazard 2	Flammability 1	Instability 0	Physical and Chemical Hazards -
<b>HMIS</b>	Health Hazard 2	Flammability 1	Physical Hazard 0	Personal Protection X

<b>Prepared By</b>	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
<b>Issuing Date</b>	29-Oct-2014
<b>Revision Date</b>	29-Oct-2014
<b>Revision Note</b>	Initial Release.

**General Disclaimer**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**

# Safety Data Sheet (SDS)

## Lithium Grease

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE /MIXTURE AND OF THE COMPANY /UNDERTAKING

#### 1.1 Product Identifier

**Material Name:** Lithium Grease

**Product Code:** 9

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Product Use:** Industrial grease

**Uses advised against:** This product must not be used in applications other than recommended in section 1 without taking the advice from supplier/manufacture

#### 1.3 Details of supplier of safety data sheet

**Supplier:** e n  
n n e  
n

**Telephone Number:** (800) 54 - 9

### SECTION 2: HAZARD IDENTIFICATION

#### 2.1 Classification of the substance of mixture

**OSHA Hazard Communication Standard :** This material is not considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200

#### 2.2 Label elements

OSHA HCS 2012 : OSHA HCS 2012 : No significant hazard as per GHS

#### 2.3 Other hazards

**Health hazards:** Not expected to be a health hazard when used under normal conditions. Prolonged or repeated skin contact without proper cleaning may clog the skin pores resulting disorders like acne/folliculitis. Used grease may contain harmful impurities/ harmful extraneous substances.

**Safety hazard:** Not classified as flammable but will burn

**Environmental hazard:** Not classified as environmental hazard under GHS criteria

**Precautionary statements:**

**Prevention:** Wear protective gloves while handling. Wear eye and face protection. Wash hand thoroughly after handling

**Response:** If on skin, wash with plenty of soap and water. Remove contaminated cloth and wash thoroughly before use. If skin irritation occurs, get medical advice. If in eyes, wash with water for several minutes, in case of contact lenses, remove and wash with plenty water. In case of irritation, get medical attention.

**Storage:** Store the product in well-ventilated area. Keep the container straight lid upside. Do not lay down upside down or do not keep container horizontally. This product has natural tendency to squeeze oil if not kept properly.

**Disposal:** Take expert advice of local regulatory agency for disposing this product.

**Hazard not otherwise classified (HNOC):** None as classified under 29 CFR 1900.1200

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

This material is defined as mixture and has no known hazards under GHS classification

**Additional information:**

As per 29 CFR 1910.1200 paragraph (i), formulation is considered as trade secret and therefore specific chemical names and their percentages of components used have not been disclosed. The details about their specific chemical names and their percentages may be provided on request to health professionals, authorized representatives of regulatory authority, employees concerned in accordance with applicable provisions of this paragraph.

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures**

**General information:** Not expected to be health hazard if used under normal conditions

**Inhalation:** Under normal conditions of intended use, this material is not expected to be inhalation hazard. If some symptom exist, remove to fresh air. If not breathing, give artificial respiration. Get medical attention

**Skin Contact:** Remove contaminated clothes. Flush exposed area with plenty of water followed by washing by soap, if available. If persistent irritation occurs, obtain medical attention. If product is injected into or under the skin due to any reason, the victim, regardless of size or appearance of wound, victim should be brought immediately to medical attention for emergency surgical needs. Though the initial symptoms due to high pressure injection may be minimal / absent, early surgical treatment may significantly reduce the extent of injury.

**Eye Contact:** Immediately flush with large quantities of cool water for at least 15 minutes. Get medical attention.

**Ingestion:** In general no treatment is necessary unless large quantities are swallowed, however, it's advisable to take medical attention. Do not induce vomiting unless directed by medical personnel. Do not give anything by mouth by an unconscious person.

**Self-protection for first aider:** When administering the first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

## **SECTION 5: FIRE FIGHTING MEASURES**

### **5.1 Extinguishing Media:**

**Suitable extinguishing media:** Water Spray (fog), dry chemical, foam, or carbon dioxide, sand to extinguish flames.

**Unsuitable extinguishing media:** Water stream may splash burning liquid and spread fire.

**5.2 Special hazard arising from the substances or mixture:** Hazardous combustion product may include a complex mixture of airborne solid and liquid particulates and gases (smoke), carbon monoxide, unidentified inorganic and organic compounds.

**5.3 Advice to firefighters:** Proper protective equipment include chemical resistant gloves to be worn, chemical resistant suit is recommended when large contact with spill product is expected. Self-contained breathing apparatus (SCBA) must be worn when approaching a fire in confined area. Select the fire fighters clothing approved by relevant standard

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch and walk through spill area. Do not touch damaged container or spilled material unless wearing appropriate protective clothing/equipment. Ventilate the closed area.

### **6.2 Emergency procedures**

Isolate the spill / leak area in all directions for about 50 meters (150 ft) for liquids and about 25 meters (75 ft.) for solids and semi-solids. Eliminate all ignition sources (no smoking, flares, sparks / flames in close vicinity). Keep unauthorized person away and ventilate closed space before entering.

### **6.3 Environmental procedures:**

Use appropriate measures for containment of spilled material to the environment. Prevent from entering/ spreading to drain, water, river, ditches by using sand, earth, floor dryers or other appropriate barriers.

### **6.4 Methods and materials for containment and cleaning up**

Shovel into suitable properly marked container for disposal or reclamation in accordance with local regulations.

### **6.5 Reference to other sections**

Refer to section 8 – exposure control / personal protection and section 13- disposal considerations

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 General Precautions**

Store in well-ventilated area, if risk on vapor inhalation is there. Use the information in this data sheet as input for risk management arising due to local conditions which help to manage safe handling of this product.

### **7.2 Precautions for safe handling**

Avoid prolonged and repeated contact with skin. Avoid inhaling the vapors/mist. When handling the drums, kegs, pails etc., proper safety shoes, and other protective clothes, safety glasses etc. should be worn. Dispose appropriately any contaminated rags/material as per prevailing local allowable practices. Keep containers in closely tight and, cool and well ventilated areas.

### **7.3 Conditions for safe storage, including any incompatibilities**

Keep containers tightly close, well-ventilated areas but covered, avoiding contact with rain or other water ingress possibilities. Keep the storage place cool preferably <120 F / <50 C. Higher temperature may create pressure buildup inside container and chances of container busting or leakage may occur under aggravated conditions. Keep away from other oxidizing and incompatible materials.

### **7.4 Specific End Use (s):**

This material should not be used for any other purpose than the intended use as per section 1 without the expert advice.

## **SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **8.1 Control parameters**

<b>Material</b>	<b>Source</b>	<b>Type</b>	<b>ppm</b>	<b>mg/m3</b>
Lithium hydroxide mono hydrate	AIHA WEEL	Ceiling		1.8 mg/m3
Mineral Oil	ACGIH	TWA –vacated and TWA		5.0 mg/m3

### **Additional information:**

Due to semi-solid nature of the product, generation of mist and dusts is unlikely to occur

### **Biological exposure index (BEI):**

No biological limit allocated

### **PNEC related information:**

Data not available

### **Monitoring methods:**

Monitoring of the concentration of substances in the breathing zone of workers or in general workplace may be required to confirm the compliance with local governing authority.

## 8.2 Engineering measures/controls

Adequate ventilation systems may be needed to control concentrations of airborne contaminants above permissible threshold applicable limits.

## 8.3 Personal protective equipment pictograms



**Respiratory:** In case of insufficient ventilation, use suitable respiratory equipment

**Eye/Face:** Wear safety goggles

**Skin/Body:** Wear safety shoes and protective gloves

## 8.4 Environmental Exposure controls

Minimize release to the environment. Follow best practices for site management and disposal of waste as per local regulations

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Information on physical and chemical properties**



**Material description**

Appearance	Semi-solid
Color	Amber
Odor	Slight hydrocarbon
Odor threshold	Data not available
<b>General properties</b>	
Boiling point	No data available
pH	Not applicable
Specific gravity (15 °C)	0.87, 7.506 (lbs/gal)
Flash point, COC, °F/°C	400 / 204
Upper/lower flammability limits	No data available
Auto-ignition temperature	No data available
Flammability	No data available
VOC, % wt., ASTM D-972	1
Vapor pressure @ ambient temp.	< 0.13 kPa (< 1 mm Hg)
Vapor density (air =1)	< 1
Explosive properties	Not classified
Oxidizing properties	No data available
<b>Other Information</b>	
Electrical conductivity	Though no data available, this material is not expected to be a static accumulator

**SECTION 10: STABILITY AND REACTIVITY**

<b>10.1 Reactivity :</b>	No reactivity is expected under normal conditions of intended use. However, under high temperature or adverse operating conditions thermal / chemical decomposition of the product may be possible
<b>10.2 Chemical Stability :</b>	No hazardous reaction is expected under normal conditions of temperature and pressure
<b>10.3 Possibility of hazardous reactions</b>	Hazardous polymerization is not expected. Reacts with strong oxidizing agents.
<b>10.4 Conditions to avoid</b>	Extreme temperature and direct sunlight / heat /flame
<b>10.5 incompatible materials</b>	Strong oxidizing agents
<b>10.6 hazardous decomposition products</b>	Hazardous decomposition is not expected to form under normal conditions of storage

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

<b>Basis of assessment</b>	Information given hereby is based on the components and the toxicology of similar products and the data indicated here are representative of the primarily base oil which is present in majority
<b>Acute oral toxicity</b>	Expected to be low toxicity ; LD 50 ( rat ) > 5000 mg/kg

<b>Acute dermal toxicity</b>	Expected to be low toxicity ; LD 50 (rat) > 3000 mg/kg
<b>Acute inhalation toxicity</b>	Not determined
<b>Skin corrosion / irritation</b>	Expected to be slightly irritating . prolonged/repeated contact with skin without adequate cleaning may clog the pores of the skin , may result disorder such as oil acne/folliculitis
<b>Serious eye damage /irritation</b>	Expected to be slightly irritating
<b>Respiratory /skin sensitization</b>	Not determined
<b>Aspiration hazard</b>	Not expected to be aspiration hazard
<b>Germ cell mutagenicity</b>	Not expected a mutagenic hazard
<b>Carcinogenicity</b>	Not considered to be carcinogenic as it contain severely hydrotreated mineral oils which are reported to be non-carcinogenic in lab animal studies. The class of oils used in making this product are not classified as carcinogenic by IARC

## 11.2 Material

## Carcinogenicity Classification

Highly refined base oil blend ( IP 346 < 3 % )	ACGIH group A4 ; not classified as human carcinogen
	IARC 3 ; not classified as to carcinogen to humans
	GHS / CLP , no carcinogenicity classification

Based on our raw material suppliers information/SDS , this material is not known to contain any chemical listed as a carcinogen or suspected carcinogen by OSHA Hazard Communication Standard 29CFR 1910.1200, IARC, or the National Toxicology Program (NTP).

## SECTION 12: ECOLOGICAL INFORMATION

<b>Basis of assessment</b>	Eco-toxicological data has not been determined specifically on this product. The information given herewith are based on the information given on eco-toxicity of components and/or on similar products. the information given here are representative of the product as whole and not as individual components
<b>12.1 Toxicity</b>	Sparingly soluble mixture in aqueous media. Not toxic to fish but may coat gill structure and cause suffocation if spilled. This product may cause gastrointestinal distress in birds and mammals through ingestion.
<b>12.2 Persistence and degradability</b>	Expected to be not readily biodegradable. The major oil component expected to biodegrade over period of 100-120 days in aerobic environment at temperature above 70 F (21 °C), however finished product contain component that may persist in the environment.
<b>12.3 Bioaccumulative potential</b>	May contain component that bioaccumulate
<b>12.4 Mobility in soil</b>	Product is semi-solid in nature in most conditions and may absorb to soil and may not be mobile. It floats on water
<b>12.5 other adverse effects</b>	Product contain the components that have been classified non-volatile in nature and therefore not expected to release to environment in significant quantities.

## **SECTION 13: DISPOSAL INFORMATION**

### **13.1 Waste treatment methods**

<b>Product disposal</b>	Try to minimize the product waste by using best applicable practices. It is the responsibility of the waste generator to evaluate the waste classification and appropriate disposal methodology in accordance with the applicable regulation. Do not dispose in to environment, in drain or in river / ponds / water reservoirs.
<b>Container disposal</b>	To be disposed in accordance with local prevailing and allowable regulations.

## **SECTION 14: TRANSPORT INFORMATION**

	<b>Bulk shipping</b>	<b>Non-bulk shipping</b>	<b>Identification #</b>	<b>Hazardous class</b>
US DOT	Not required	Not required	Not required	Not required
Canadian TDG	Not required	Not required	Not required	Not required
European	Not required	Not required	Not required	Not required
ADR, IMDG, IATA-DGR	Not classified as hazardous product for land, sea and air transport			

## **SECTION 15: REGULATORY INFORMATION**

**OSHA Hazard Communication Standard:** This material is not considered hazardous in accordance with OSHA HAzCom 2012, 29 CFR 1910.1200.

**US Inventory list:** All components are listed or exempted (TSCA 8b)

**SARA (302/304):** No products were found

**SARA (311/312):**

**Classification:** Immediate (acute) health hazard, delayed (chronic) health hazard

<b>Component</b>	<b>Fire hazard</b>	<b>Sudden release of pressure</b>	<b>Reactive</b>	<b>Acute health hazard</b>	<b>Delayed health hazard</b>
Base oil	No	No	No	No	Yes
Lithium 12 hydroxy Stearate	Yes	No	No	Yes	Not known

**SARA (313) Toxic Release Inventory:** This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program

**Massachusetts:** None of the components are listed

**New York:** None of the components are listed

**New Jersey:** lithium hydroxide is listed

**WHMIS:** This product is not a controlled product ;

**Canadian NPRI:** none of the components are listed  
**CEPA toxic substance:** none of the components are listed  
**Canadian inventory list:** all components are listed or exempted  
**Australia Inventory ( AICS ) :** All components are listed or exempted  
**China Inventory ( IECSC ) :** All components are listed or exempted  
**Japan Inventory :** Not determined  
**Korea Inventory :** All components are listed or exempted  
**Malaysia Inventory ( EHS Register ) :** Not determined  
**New Zealand inventory of Chemicals ( NZIoC ) :** All components are listed or exempted  
**Philippines Inventory ( PICCS ) :** All components are listed or exempted  
**Taiwan Inventory ( CSNN ) :** Not determined

**SECTION 16: OTHER INFORMATION**

	NFPA 704	NPCA-HMIS	KEY
Health	1	1	0 = Minimal
Fire	1	1	1 = slight
Reactivity	0	0	2 = Moderate
Specific	None	N/A	3 = Serious

This safety data sheet contains the following revisions:

**Revision Date:** June 19, 2015

**Supersedes:** None

*Plews, Inc. believes that the information and recommendations given hereby is based reported information based on the components and of similar products. The data indicated here are representative of the product as whole rather than for individual components. No warranty of fitness, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with any other materials or process. Further, since the conditions and methods of use of this product and of the information referred to herein are beyond the control of Plews, Inc., Plews, Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.*

# SAFETY DATA SHEET

Lucas Transmission Fix



## Section 1. Identification

GHS product identifier : Lucas Transmission Fix  
Other means of identification : Not available.  
Product number : 10009, 10087, 10140, 10141

### Relevant identified uses of the substance or mixture and uses advised against

Oil Additive

Supplier's details : Lucas Oil Products, Inc  
302 North Sheridan Street  
Corona, California 92880-2067  
Toll Free: (800) 342-2512  
Tel: (951) 270-0154  
Fax: (951) 270-1902  
Website: www.LucasOil.com

Emergency telephone number (with hours of operation) : (951) 493-1149  
(951) 847-5949  
Markn@lucasoil.com

7:00A.M. to 5:00P.M. Monday thru Friday

## Section 2. Hazards identification

OSHA/HCS status : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

### GHS label elements

Signal word : No signal word.  
Hazard statements : No known significant effects or critical hazards.

### Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.  
Prevention : Not applicable.  
Response : Not applicable.  
Storage : Not applicable.  
Disposal : Not applicable.  
Hazards not otherwise classified : None known.



## Section 3. Composition/information on ingredients

Substance/mixture : Substance  
 Other means of identification : Not available.

### CAS number/other identifiers

CAS number : Not available.  
 Product code : Not available.

Ingredient name	%	CAS number
Distillates (petroleum), solvent-refined heavy naphthenic	60 - 100	64741-96-4

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact** : Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

Eye contact : No known significant effects or critical hazards.  
 Inhalation : No known significant effects or critical hazards.  
 Skin contact : No known significant effects or critical hazards.  
 Ingestion : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

Eye contact : No known significant effects or critical hazards.  
 Inhalation : No known significant effects or critical hazards.  
 Skin contact : No known significant effects or critical hazards.  
 Ingestion : No known significant effects or critical hazards.

### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.



## Section 4. First aid measures

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : No specific fire or explosion hazard.

Hazardous thermal decomposition products : No specific data.

Special protective actions for fire-fighters : No special precaution is required.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), solvent-refined heavy naphthenic	ACGIH TLV (United States, 3/2012). TWA: 5 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction NIOSH REL (United States, 6/2009). TWA: 5 mg/m <sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m <sup>3</sup> 15 minutes. Form: Mist OSHA PEL (United States, 6/2010). TWA: 5 mg/m <sup>3</sup> 8 hours.

- Appropriate engineering controls** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

#### Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.



## Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Clear.]
- Color** : Red.
- Odor** : Petroleum.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : >260°C (>500°F)
- Flash point** : Closed cup: 223.88°C (435°F)
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : 0.9273
- Solubility** : Not available.
- Solubility in water** : Negligible.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Kinematic (100°C (212°F)): 0.48 cm<sup>2</sup>/s (48 cSt)

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 10. Stability and reactivity

- Conditions to avoid** : No specific data.
- Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), solvent-refined heavy naphthenic	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

#### Irritation/Corrosion

- Skin** : There is no data available.
- Eyes** : There is no data available.
- Respiratory** : There is no data available.

#### Sensitization

- Skin** : There is no data available.
- Respiratory** : There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

There is no data available.

#### Reproductive toxicity

There is no data available.

#### Teratogenicity

There is no data available.

#### Specific target organ toxicity (single exposure)

There is no data available. Specific target organ

toxicity (repeated exposure) There is no data available.

#### Aspiration hazard

There is no data available.

- Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

## Section 11. Toxicological information

### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.

#### Long term exposure

Potential immediate effects	: No known significant effects or critical hazards.
Potential delayed effects	: No known significant effects or critical hazards.

#### Potential chronic health effects

General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

There is no data available.

## Section 12. Ecological information

### Toxicity

There is no data available.

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

There is no data available.

### Mobility in soil

Soil/water partition coefficient ( $K_{oc}$ )	: There is no data available.
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Other adverse effects : No known significant effects or critical hazards.



## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

**Special precautions for user** : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) CDR Exempt/Partial exemption: All components are listed or exempted.  
United States inventory (TSCA 8b): All components are listed or exempted.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed





## Section 15. Regulatory information

DEA List I Chemicals : Not listed  
(Precursor Chemicals)

DEA List II Chemicals : Not listed  
(Essential Chemicals)

### SARA 302/304

#### Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

### SARA 311/312

Classification : Not applicable.

#### Composition/information on ingredients

No products were found.

### State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : The following components are listed: Distillates (petroleum), solvent-refined heavy naphthenic

Pennsylvania : None of the components are listed.

#### California Prop. 65

No products were found.

### International regulations

International lists : Australia inventory (AICS): All components are listed or exempted.  
China inventory (IECSC): All components are listed or exempted.  
Japan inventory: Not determined.  
Korea inventory: All components are listed or exempted.  
Malaysia Inventory (EHS Register): Not determined.  
New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.  
Philippines inventory (PICCS): All components are listed or exempted.  
Taiwan inventory (CSNN): Not determined.

Chemical Weapons : Not listed  
Convention List Schedule I Chemicals

Chemical Weapons : Not listed  
Convention List Schedule II Chemicals

Chemical Weapons : Not listed  
Convention List Schedule III Chemicals

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health : 0 \* Flammability : 1 Physical hazards : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.





## Section 16. Other information

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)

Health : 0 Flammability : 1 Instability : 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

Date of issue mm/dd/yyyy : 04/15/2013  
Version : 1  
Revised Section(s) : Not applicable.  
Prepared by : KMK Regulatory Services Inc.  
Key to abbreviations : ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.























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# Mercury Quicksilver PWC 2-Cycle Engine Oil

Mercury Marine  
P.O. Box 1939  
Fond du Lac, WI 54935

MSDS No. 140-3600Q  
Revision Date 7/25/2008

**IMPORTANT:** This MSDS is prepared in accordance with 29 CFR 1910.1200. Read this MSDS before transporting, handling, storing or disposing of this product and forward this information to employees, customers and users of this product.

Hazard Rankings		
	HMIS	NFPA
Health Hazard	1	1
Fire Hazard	1	1
Reactivity	0	0

\* = Chronic Health Hazard

## Emergency Overview

**Physical State** Liquid.  
**Color** Purple. **Odor** Mild petroleum odor

**WARNING:**  
**Contains Petroleum Distillates.**  
**Harmful if swallowed - Can enter lungs and cause damage.**  
**If swallowed, DO NOT induce vomiting.**  
**Call a physician immediately.**  
**Spills may create a slipping hazard.**

## Protective Equipment

Minimum Recommended  
See Section 8 for Details



## SECTION 1. PRODUCT IDENTIFICATION

<b>Product Name</b>	Mercury PWC 2-Cycle Engine Oil	<b>Technical Contact</b>	(920) 929-5000
<b>Product Type</b>	Mercury Quicksilver	<b>CHEMTREC Emergency (United States Only)</b>	(800) 424-9300
<b>CAS Number</b>		<b>Part Number(s):</b>	92-858032Q01, 92-858033Q01, 92-881163Q 1, 92-881164Q 1, 92-881164Q03, 92-883721Q01
<b>Product Family</b>	Two cycle engine oil		

## SECTION 2. COMPOSITION

Component Name(s)	CAS Registry No.	Concentration (%)
Highly-refined petroleum lubricant oils	Various	60 - 100
Distillates (petroleum), hydrotreated light	64742-47-8	10 - 30
Polybutene	9003-29-6	7 - 13
Proprietary Ingredients	Proprietary Mixture	1 - 5

## SECTION 3. HAZARDS IDENTIFICATION

Also see Emergency Overview and Hazard Ratings on the top of Page 1 of this MSDS.

**Major Route(s) of Entry** Skin contact.

### Signs and Symptoms of Acute Exposure

**Inhalation** At elevated temperatures or in enclosed spaces, product mist or vapors may irritate the mucous membranes of the nose, the throat, bronchi, and lungs.

**Eye Contact** This product can cause transient mild eye irritation with short-term contact with liquid sprays or mists. Symptoms include stinging, watering, redness, and swelling.

# Mercury PWC Oil

**Skin Contact** This product can cause mild, transient skin irritation. The severity of irritation will depend on the amount of material that is applied to the skin and the speed and thoroughness that it is removed. Symptoms include redness, itching, and burning of the skin. Repeated or prolonged skin contact can produce moderate irritation (dermatitis).

**Ingestion** If swallowed, large volumes of material can cause generalized depression, headache, drowsiness, nausea, vomiting and diarrhea. Smaller doses can cause a laxative effect. If aspirated into the lungs, liquid can cause lung damage.

**Chronic Health Effects Summary** Prolonged and/or repeated skin contact may cause irritation and inflammation. Symptoms include defatting, redness, dryness, blistering eczema-like lesions, scaly dermatitis, and/or more serious skin disorders. Chronic effects of ingestion and subsequent aspiration into the lungs may cause pneumatocele (lung cavity) formation and chronic lung dysfunction.

**Conditions Aggravated by Exposure** Disorders of the following organs or organ systems that may be aggravated by significant exposure to this material or its components include: Skin, Respiratory System, Liver, Kidneys, Central Nervous System (CNS)

**Target Organs** May cause damage to the following organs: skin, eye, lens or cornea

**Carcinogenic Potential** This product is not known to contain any components at concentrations above 0.1% which are considered carcinogenic by OSHA, IARC or NTP.

**OSHA Hazard Classification is indicated by an "X" in the box adjacent to the hazard title. If no "X" is present, the product does not exhibit the hazard as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200).**

OSHA Health Hazard Classification				OSHA Physical Hazard Classification					
Irritant	<input type="checkbox"/>	Sensitizer	<input type="checkbox"/>	Combustible	<input type="checkbox"/>	Explosive	<input type="checkbox"/>	Pyrophoric	<input type="checkbox"/>
Toxic	<input type="checkbox"/>	Highly Toxic	<input type="checkbox"/>	Flammable	<input type="checkbox"/>	Oxidizer	<input type="checkbox"/>	Water-reactive	<input type="checkbox"/>
Corrosive	<input type="checkbox"/>	Carcinogenic	<input type="checkbox"/>	Compressed Gas	<input type="checkbox"/>	Organic Peroxide	<input type="checkbox"/>	Unstable	<input type="checkbox"/>

## SECTION 4. FIRST AID MEASURES

**Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this MSDS.**

**Inhalation** Move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If breathing is difficult, 100 percent humidified oxygen should be administered by a qualified individual. Seek medical attention immediately. Keep the affected individual warm and at rest.

**Eye Contact** Check for and remove contact lenses. Flush eyes with cool, clean, low-pressure water while occasionally lifting and lowering eyelids. Seek medical attention if excessive tearing, redness, or pain persists.

**Skin Contact** If burned by hot material, cool skin by quenching with large amounts of cool water. For contact with product at ambient temperatures, remove contaminated shoes and clothing. Wipe off excess material. Wash exposed skin with mild soap and water. Seek medical attention if tissue appears damaged or if pain or irritation persists. Thoroughly clean contaminated clothing before reuse. Clean or discard contaminated leather goods. If material is injected under the skin, seek medical attention immediately.

**Ingestion** Do not induce vomiting unless directed to by a physician. Do not give anything to drink unless directed to by a physician. Never give anything by mouth to a person who is not fully conscious. If significant amounts are swallowed or irritation or discomfort occurs, seek medical attention immediately.

**Notes to Physician** INGESTION: The viscosity range of the product(s) represented by this MSDS is greater than 100 SUS at 100°F. Careful gastric lavage may be considered to evacuate large quantities of material.



## SECTION 5. FIRE FIGHTING MEASURES

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<b>NFPA Flammability Classification</b>	NFPA Class-IIIB combustible material.		
<b>Flash Point</b>	Closed cup: 115°C (239°F). (Pensky-Martens (ASTM D-93)) Open cup: 155°C (311°F) (Cleveland.).		
<b>Lower Flammable Limit</b>	No data.	<b>Upper Flammable Limit</b>	No data.
<b>Autoignition Temperature</b>	Not available.		
<b>Hazardous Combustion Products</b>	Combustion gases may contain carbon monoxide, carbon dioxide, and irritating or acrid combustion products.		
<b>Special Properties</b>	This material will release vapors when heated above the flash point temperature that can ignite when exposed to a source of ignition. In enclosed spaces, vapors can ignite with explosive force. Mists or sprays may burn at temperatures below the flash point.		
<b>Extinguishing Media</b>	SMALL FIRE: Use dry chemicals, carbon dioxide, foam, or inert gas (nitrogen). Carbon dioxide and inert gas can displace oxygen. Use caution when applying carbon dioxide or inert gas in confined spaces. LARGE FIRE: Use foam, water fog, or water spray. Water fog and spray are effective in cooling containers and adjacent structures. However, water can cause frothing and/or may not extinguish the fire. Water can be used to cool the external walls of vessels to prevent excessive pressure, autoignition or explosion. DO NOT use a solid stream of water directly on the fire as the water may spread the fire to a larger area.		
<b>Protection of Fire Fighters</b>	Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies.		

## SECTION 6. ACCIDENTAL RELEASE MEASURES

---

**Take proper precautions to ensure your own health and safety before attempting spill control or clean-up. For more specific information, refer to the Emergency Overview on Page 1, Exposure Controls and Personal Protection in Section 8 and Disposal Considerations in Section 13 of this MSDS.**

Do not touch damaged containers or spilled material unless wearing appropriate protective equipment. Slipping hazard; do not walk through spilled material. Stop leak if you can do so without risk. For small spills, absorb or cover with dry earth, sand, or other inert non-combustible absorbent material and place into waste containers for later disposal. Contain large spills to maximize product recovery or disposal. Prevent entry into waterways or sewers. In urban area, cleanup spill as soon as possible. In natural environments, seek cleanup advice from specialists to minimize physical habitat damage. This material will float on water. Absorbent pads and similar materials can be used. Comply with all laws and regulations.

## SECTION 7. HANDLING AND STORAGE

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**Handling** Keep containers closed and do not handle or store near heat, sparks, or any other potential ignition sources. Avoid contact with oxidizing agents. Never siphon by mouth. Avoid contact with eyes, skin, and clothing. Avoid contamination and extreme temperatures.

Empty containers may contain product residues that can ignite with explosive force. Drain and purge equipment, as necessary, to remove material residues. Follow proper entry procedures, including compliance with 29 CFR 1910.146 prior to entering confined spaces such as tanks or pits. Use appropriate respiratory protection when concentrations exceed any established occupational exposure level (See Section 8). Promptly remove contaminated clothing. Wash exposed skin thoroughly with soap and water after handling.

# Mercury PWC Oil

Do not pressurize, cut, weld, braze solder, drill, grind or expose containers to flames, sparks, heat or other potential ignition sources. Protect containers against physical damage. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers and/or waste residues of this product.

## Storage

Keep container tightly closed. Store in a cool, dry, well-ventilated area. Store only in approved containers. Do not store with strong oxidizing agents. Do not store at elevated temperatures. Avoid storing product in direct sunlight for extended periods of time. Storage area must meet OSHA requirements and applicable fire codes. Consult appropriate federal, state and local authorities before reusing, reconditioning, reclaiming, recycling or disposing of empty containers or waste residues of this product.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

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### Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). An eye wash station and safety shower should be located near the work-station.

### Personal Protective Equipment

Personal protective equipment should be selected based upon the conditions under which this material is used. A hazard assessment of the work area for PPE requirements should be conducted by a qualified professional pursuant to OSHA regulations. The following pictograms represent the minimum requirements for personal protective equipment. For certain operations, additional PPE may be required.



### Eye Protection

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. Wear goggles if splashing or spraying is anticipated. Wear goggles and face shield if material is heated above 125°F (51°C). Have suitable eye wash water available.

### Hand Protection

Avoid skin contact. Use heavy duty gloves constructed of chemical resistant materials such as Viton® or heavy nitrile rubber. Wash hands with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.

### Body Protection

Use clean protective clothing if splashing or spraying conditions are present. Protective clothing may include long-sleeve outer garment, apron, or lab coat. If significant contact occurs, remove oil-contaminated clothing as soon as possible and promptly shower. Launder contaminated clothing before reuse or discard. Wear heat protective boots and protective clothing when handling material at elevated temperatures.

### Respiratory Protection

The need for respiratory protection is not anticipated under normal use conditions and with adequate ventilation. If elevated airborne concentrations above applicable workplace exposure levels are anticipated, a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be used. Protection factors vary depending upon the type of respirator used. Respirators should be used in accordance with OSHA requirements (29 CFR 1910.134).

### General Comments

Use good personal hygiene practices. Wash hands and other exposed skin areas with plenty of mild soap and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners. Since specific exposure standards/control limits have not been established for this product, the "Oil Mist, Mineral" exposure limits shown below are suggested as minimum control guidelines.

### Occupational Exposure Guidelines

#### Substance

#### Applicable Workplace Exposure Levels

## Mercury PWC Oil

Oil Mist, Mineral

### ACGIH (United States).

TWA: 5 mg/m<sup>3</sup>

STEL: 10 mg/m<sup>3</sup>

### OSHA (United States).

TWA: 5 mg/m<sup>3</sup>

Light aliphatic hydrocarbons

### ACGIH (United States).

TWA: 100 ppm

### OSHA (United States).

TWA: 500 ppm

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES (TYPICAL)

<b>Physical State</b>	Liquid.	<b>Color</b>	Purple.	<b>Odor</b>	Mild petroleum odor
<b>Specific Gravity</b>	0.87 (Water = 1)	<b>pH</b>	Not applicable	<b>Vapor Density</b>	>1 (Air = 1)
<b>Boiling Range</b>	Not available.			<b>Melting/Freezing Point</b>	Not available.
<b>Vapor Pressure</b>	<0.01 kPa (<0.1 mm Hg) (at 20°C)			<b>Volatility</b>	141 g/l VOC (w/v)
<b>Solubility in Water</b>	Negligible solubility in cold water.			<b>Viscosity (cSt @ 40°C)</b>	64
<b>Flash Point</b>	Closed cup: 115°C (239°F). (Pensky-Martens (ASTM D-93)) Open cup: 155°C (311°F) (Cleveland.).				
<b>Additional Properties</b>	Gravity, °API (ASTM D287) = 30.5 @ 60° F Density = 7.27 Lbs/gal. Viscosity (ASTM D2161) = 331 SUS @ 100° F				

## SECTION 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable.	<b>Hazardous Polymerization</b>	Not expected to occur.
<b>Conditions to Avoid</b>	Keep away from extreme heat, sparks, open flame, and strongly oxidizing conditions.		
<b>Materials Incompatibility</b>	Strong oxidizers.		
<b>Hazardous Decomposition Products</b>	No additional hazardous decomposition products were identified other than the combustion products identified in Section 5 of this MSDS.		

## SECTION 11. TOXICOLOGICAL INFORMATION

For other health-related information, refer to the Emergency Overview on Page 1 and the Hazards Identification in Section 3 of this MSDS.

<b>Toxicity Data</b>	<b>Highly-refined petroleum lubricant oils</b>
	ORAL (LD50): Acute: >5000 mg/kg [Rat].
	DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. In long term studies (up to two years) no carcinogenic effects have been reported in any animal species tested.

# Mercury PWC Oil

## Distillates (petroleum), hydrotreated light

ORAL (LD50): Acute: >5000 mg/kg [Rat].

DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].

Studies on laboratory animals have associated similar materials with eye and respiratory tract irritation. Repeated exposure to elevated concentrations of hydrocarbon solvents can produce a variety of transient CNS effects (e.g., dizziness, headache, narcosis, etc). Studies on laboratory animals have shown similar materials to cause skin irritation after repeated or prolonged contact. Repeated direct application of similar materials to the skin can produce defatting dermatitis and kidney damage in laboratory animals. The most common effects observed in repeated dose animal studies with mineral spirits are kidney changes that are consistent with an alpha 2u-globulin- mediated process that is not regarded as relevant to humans. Certain studies have reported effects in the liver as well as hematological or urine chemistry changes. In general, these effects have not to been shown to be dose-related.

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Analysis for ecological effects has not been conducted on this product. However, if spilled, this product and any contaminated soil or water may be harmful to human, animal, and aquatic life. Also, the coating action associated with petroleum and petroleum products can be harmful or fatal to aquatic life and waterfowl.

### Environmental Fate

An environmental fate analysis is not available for this specific product. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

## SECTION 13. DISPOSAL CONSIDERATIONS

**Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.**

Conditions of use may cause this material to become a "hazardous waste", as defined by federal or state regulations. It is the responsibility of the user to determine if the material is a "hazardous waste" at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR 260 through 40 CFR 271). State and/or local regulations may be more restrictive. Contact your regional US EPA office for guidance concerning case specific disposal issues. Empty drums and pails retain residue. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose this product's empty container to heat, flame, or other ignition sources. DO NOT attempt to clean it. Empty drums and pails should be drained completely, properly bunged or sealed, and promptly sent to a reconditioner.

## SECTION 14. TRANSPORT INFORMATION

**The shipping description below may not represent requirements for all modes of transportation, shipping methods or locations outside of the United States.**

**US DOT Status** Not regulated by the U.S. Department of Transportation as a hazardous material.

**Proper Shipping Name** Not regulated.

**Hazard Class** Not regulated.

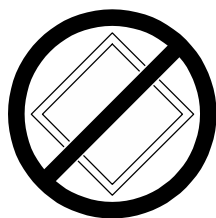
**Packing Group** Not applicable.

**UN/NA Number** Not regulated.

# Mercury PWC Oil

**Reportable Quantity** A Reportable Quantity (RQ) has not been established for this material.

**Placard(s)**



**Emergency Response Guide No.** Not applicable.

**MARPOL III Status** Not a DOT "Marine Pollutant" per 49 CFR 171.8.

**Oil:** The product(s) represented by this MSDS is (are) regulated as "oil" under 49 CFR Part 130. Shipments by rail or highway in packaging having a capacity of 3500 gallons or more or in a quantity greater 42,000 gallons are subject to these requirements. In addition, mixtures containing 10% or more of this product may be subject to these requirements.

## SECTION 15. REGULATORY INFORMATION

**TSCA Inventory** This product and/or its components are listed on the Toxic Substances Control Act (TSCA) inventory.

**SARA 302/304 Emergency Planning and Notification** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for "Extremely Hazardous Substances" listed in 40 CFR 302.4 and 40 CFR 355. No components were identified.

**SARA 311/312 Hazard Identification** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to this subpart to submit aggregate information on chemicals by "Hazard Category" as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:  
No SARA 311/312 hazard categories identified.

**SARA 313 Toxic Chemical Notification and Release Reporting** This product contains the following components in concentrations above *de minimis* levels that are listed as toxic chemicals in 40 CFR Part 372 pursuant to the requirements of Section 313 of SARA: No components were identified.

**CERCLA** The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQ's) listed in 40 CFR 302.4. As defined by CERCLA, the term "hazardous substance" does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4. This product or refinery stream is not known to contain chemical substances subject to this statute. However, it is recommended that you contact state and local authorities to determine if there are any other reporting requirements in the event of a spill.

**Clean Water Act (CWA)** This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

**California Proposition 65** This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):  
Ethylbenzene: <0.005%  
Toluene: <0.001%

**New Jersey Right-to-Know Label** Petroleum Oil (Two Cycle Engine Oil)

**Additional Remarks** No additional regulatory remarks.

## SECTION 16. OTHER INFORMATION

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Refer to the top of Page 1 for the HMIS and NFPA Hazard Ratings for this product.

### REVISION INFORMATION

Version Number 2.0  
Revision Date 7/25/2008

### ABBREVIATIONS

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AP: Approximately EQ: Equal >: Greater Than <: Less Than NA: Not Applicable ND: No Data NE: Not Established  
ACGIH: American Conference of Governmental Industrial Hygienist AIHA: American Industrial Hygiene Association  
IARC: International Agency for Research on Cancer NTP: National Toxicology Program  
NIOSH: National Institute of Occupational Safety and Health OSHA: Occupational Safety and Health Administration  
NPCA: National Paint and Coating Manufacturers Association HMIS: Hazardous Materials Information System  
NFPA: National Fire Protection Association EPA: US Environmental Protection Agency

### DISCLAIMER OF LIABILITY

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**MFR: CITO Petroleum Corporation P.O. Box 4689 Houston, TX 77210**

**THE INFORMATION IN THIS MSDS WAS OBTAINED FROM SOURCES WHICH WE BELIEVE ARE RELIABLE. HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED REGARDING ITS CORRECTNESS. SOME INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE SUBSTANCE ITSELF. THIS MSDS WAS PREPARED AND IS TO BE USED ONLY FOR THIS PRODUCT. IF THE PRODUCT IS USED AS A COMPONENT IN ANOTHER PRODUCT, THIS MSDS INFORMATION MAY NOT BE APPLICABLE. USERS SHOULD MAKE THEIR OWN INVESTIGATIONS TO DETERMINE THE SUITABILITY OF THE INFORMATION OR PRODUCTS FOR THEIR PARTICULAR PURPOSE.**

**THE CONDITIONS OR METHODS OF HANDLING, STORAGE, USE, AND DISPOSAL OF THE PRODUCT ARE BEYOND OUR CONTROL AND MAY BE BEYOND OUR KNOWLEDGE. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH HANDLING, STORAGE, USE OR DISPOSAL OF THE PRODUCT.**

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# MATERIAL SAFETY DATA SHEET

## MC 2044

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### 1. PRODUCT AND COMPANY IDENTIFICATION

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TRADE NAME	MC 2044 Multi-Purpose Lithium Grease
PRODUCT DESCRIPTION	LUBRICATING GREASE
Product number	LX-1902
PRODUCT USE	Lubricating Grease
SUPPLIER	Lumax Lubrication Equipment 3705 Centre Circle Fort Mill, SC 29715 Tel: +01 (803) 548-3000 Tel: +01 (803) 547-0800
CONTACT PERSON	Lumax
EMERGENCY TELEPHONE	INFOTRAC U.S. and Canada - (800) 535-5053 Outside the U.S. and Canada - +01-352-323-3500
Date of last issue	2011-2-17

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### 2. COMPOSITION AND INFORMATION ON INGREDIENTS

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INGREDIENT NAME	CAS No.	WEIGHT
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	Mixture**(2)	87-93 %
*LITHIUM STEARATE SOAP GREASE THICKENER	Mixture	5-10 %
*PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	68649-42-3	0.5-1.5 %
*1-PROPENE-2-METHYL, SULFURIZED	68511-50-2	0.5-1.5 %
*1H-IMIDAZOLE-1-ETHANOL, 4,5-DIHYDRO-, 2-ALKYL DERIVS. (CAS# 95-38-5, 21652-27-7, OR 61791-39-7)	Varies	<0.5

\* This chemical(s) is hazardous according to OSHA/WHIMIS criteria

#### COMPOSITION COMMENTS

Refer to section eight (8) for exposure limits on ingredients.

Chemical ingredients not regulated by OSHA, SARA, state or federal agencies are treated confidentially.

\*\* (2) The base oil for this product can be a mixture of any of the following highly refined petroleum streams:

CAS 64741-88-4; CAS 64741-89-5; CAS 64741-95-3; CAS 64741-96-4; CAS 64741-97-5; CAS 64742-01-4; CAS 64742-52-5; CAS 64742-53-6; CAS 64742-54-7; CAS 64742-55-8; CAS 64742-56-9; CAS 64742-57-0; CAS 64742-62-7; CAS

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64742-63-8; CAS 64742-65-0; CAS 72623-83-7; CAS 72623-85-9; CAS 72623-86-0; CAS 72623-87-1. Carcinogenicity: The petroleum base oils contained in this product have been highly refined by a variety of processes including solvent extraction, solvent dewaxing and hydrotreating to remove aromatics and improve performance characteristics. All petroleum base oils contained in this product meet the IP 346 criteria of less than 3 percent DMSO extractable PAH's and are not considered carcinogens by IARC, NTP or OSHA.

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### 3. HAZARDS IDENTIFICATION

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#### EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin. Repeated exposure may cause skin dryness or cracking.

<b>HEALTH HAZARDS, GENERAL</b>	Exposure to vapors generated at high temperatures may cause respiratory irritation.
<b>INHALATION</b>	May cause irritation to the respiratory system.
<b>INGESTION</b>	May cause stomach pain or vomiting.
<b>SKIN</b>	May cause skin irritation/eczema.
<b>EYES</b>	Irritating to eyes.
<b>SENSITIZATION</b>	No known information.
<b>CARCINOGENICITY</b>	IARC: Not listed as a Group 1, 2A, or 2B agent. OSHA: Not regulated. NTP: Not listed.
<b>TERATOGENICITY</b>	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.
<b>ROUTE OF ENTRY</b>	Inhalation. Skin and/or eye contact. Ingestion.
<b>MEDICAL SYMPTOMS</b>	MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

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### 4. FIRST AID MEASURES

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<b>INHALATION</b>	Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor of hot product, immediately remove from source of exposure. Move the exposed person to fresh air at once. For breathing difficulties oxygen may be necessary. Get medical attention if any discomfort continues.
<b>EYES</b>	Rinse the eye with water immediately. Continue to rinse for at least 15 minutes. Contact physician if discomfort continues.
<b>SKIN</b>	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
<b>INGESTION</b>	DO NOT INDUCE VOMITING! Get medical attention immediately! Do not give milk or oil. Drink large amounts of water. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

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### 5. FIRE FIGHTING MEASURES

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<b>FLASH POINT (°C)</b>	> 200 C (392 F ) PM Closed cup.
<b>FLAMMABILITY LIMIT - LOWER(%)</b>	N/D

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<b>FLAMMABILITY LIMIT - UPPER(%)</b>	N/D
<b>EXTINGUISHING MEDIA</b>	Use: Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc. Alcohol resistant foam. Water spray, fog or mist.
<b>SPECIAL FIRE FIGHTING PROCEDURES</b>	Use water to keep fire exposed containers cool and disperse vapors. Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.
<b>UNUSUAL FIRE &amp; EXPLOSION HAZARDS</b>	Pressure will increase in over heated, closed containers.
<b>HAZARDOUS COMBUSTION PRODUCTS</b>	Acrid smoke/fumes. Oxides of: Carbon. Phosphorus.
<b>PROTECTIVE MEASURES IN CASE OF FIRE</b>	Self-contained breathing equipment and chemical resistant clothing recommended.

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## 6. ACCIDENTAL RELEASE MEASURES

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<b>PERSONAL PRECAUTIONS</b>	Minimize skin contact. Avoid breathing vapors. Wear an appropriate respirator if exposure exceeds recommended guidelines. Remove sources of ignition. Wear suitable eye protection.
<b>PRECAUTIONS TO PROTECT THE ENVIRONMENT</b>	Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with applicable government regulations.
<b>SPILL CLEAN-UP PROCEDURES</b>	Contain spill. Absorb small amounts. Collect and return large amounts to shipping container. Rinse area with water.

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## 7. HANDLING AND STORAGE

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<b>HANDLING PRECAUTIONS</b>	Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Do not reuse container. Keep lid closed when not in use. Do not store or mix with strong oxidizers. Avoid spilling, skin and eye contact. Eye wash and emergency shower must be available at the work place.
<b>HANDLING DESCRIPTION</b>	Prevent small spills and leakages to avoid slip hazard.
<b>STORAGE PRECAUTIONS</b>	Store separate from strong acids and oxidizers. Keep away from heat, sparks and open flame.
<b>STORAGE CRITERIA</b>	Chemical storage.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

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COMPONENT	STD	TWA	STEL	TWA	STEL
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	OSHA			5 mg/m3 as oil mist	
	ACGIH			5 mg/m3 as oil mist	10 mg/m3 as oil mist
<b>PROTECTIVE EQUIPMENT</b>					

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<b>ENGINEERING CONTROLS</b>	Use engineering controls to reduce air contamination to permissible exposure level.
<b>VENTILATION</b>	No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.
<b>RESPIRATORS</b>	No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.
<b>PROTECTIVE GLOVES</b>	Chemical resistant gloves recommended to prevent prolonged or repeated contact. Use protective gloves made of: Latex.
<b>EYE PROTECTION</b>	Wear splash-proof eye goggles to prevent any possibility of eye contact.
<b>PROTECTIVE CLOTHING</b>	Wear appropriate clothing to prevent repeated or prolonged skin contact.
<b>HYGIENIC WORK PRACTICES</b>	Wash at the end of each work shift and before eating, smoking and using the toilet.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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<b>APPEARANCE/PHYSICAL STATE</b>	Grease.		
<b>COLOR</b>	Amber.		
<b>ODOR</b>	Mild (or faint). Petroleum.		
<b>SOLUBILITY DESCRIPTION</b>	Insoluble in water.		
<b>DENSITY</b>	0.90	<b>Temperature (°C)</b>	15.6 (60°F)
<b>VAPOR DENSITY (air=1)</b>	> 5		
<b>VAPOR PRESSURE</b>	< 0.1 mmHg	<b>Temperature (°C)</b>	20 (68°F)
<b>EVAPORATION RATE</b>	< 0.01	<b>Reference</b>	BuAc=1
<b>pH-VALUE, CONC. SOLUTION</b>	N/D		
<b>VISCOSITY (interval)</b>	11.5 - 14.5 cSt	<b>Temperature (°C)</b>	100 C

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## 10. STABILITY AND REACTIVITY

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<b>STABILITY</b>	Normally stable.
<b>CONDITIONS TO AVOID</b>	Avoid contact with acids and oxidizing substances.
<b>HAZARDOUS POLYMERIZATION</b>	Will not occur.
<b>POLYMERIZATION DESCRIPTION</b>	Not applicable
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b>	Oxides of: Carbon. Phosphorus. Sulfur.

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## 11. TOXICOLOGICAL INFORMATION

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**TOXICOLOGICAL INFORMATION** No experimental toxicological data on the preparation as such is available.

**COMPONENT LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED**

**TOXICOLOGICAL DATA** WHMIS (Canada) = Not a controlled product.  
**TOXIC DOSE - LD 50** > 5000 mg/kg (oral rat)  
**TOXIC DOSE - LD 50 SKIN** > 2000 mg/kg (skn rbt)  
**TOXIC CONC. - LC 50** No Information Available (NIA).  
**IRRITATION** Prolonged skin contact may cause irritation.  
**SENSITIZATION** Not known to be a sensitizer.

**COMPONENT LITHIUM STEARATE SOAP GREASE THICKENER**

**TOXICOLOGICAL DATA** Irritating effects. Open irritation test 24 hours. Skin. Rabbit. Slight (4 Hr) to Moderate (24 Hr) Irritant  
 Irritating effects. Eye irritation test. 72 hours. Eye. Rabbit. Practically Non-Irritating  
 Sensitization. Skin. Guinea pig. Not Sensitizing  
 Chronic toxicity. Oral. Rat. 1,000 mg/kg  
 Chronic toxicity. Skin. Rat. 2,100 mg/kg  
**TOXIC DOSE - LD 50** > 5,000 mg/kg (oral rat)  
**TOXIC DOSE - LD 50 SKIN** > 3,000 mg/kg (skn rbt)

**COMPONENT PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS**

**TOXIC DOSE - LD 50** 4739 mg/kg (oral rat)  
**TOXIC DOSE - LD 50 SKIN** > 2000 mg/kg (skn rbt)

**COMPONENT 1-PROPENE-2-METHYL, SULFURIZED**

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## 12. ECOLOGICAL INFORMATION

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**ECOLOGICAL INFORMATION** There is no ecological data on the product itself.

**COMPONENT LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED**

**COMPONENT LITHIUM STEARATE SOAP GREASE THICKENER**

**ECOTOXICOLOGICAL DATA** WGK 1

**COMPONENT PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS**

**ECOTOXICOLOGICAL DATA** WGK 2

**COMPONENT 1-PROPENE-2-METHYL, SULFURIZED**

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## 13. DISPOSAL CONSIDERATIONS

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**DISPOSAL METHODS** Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.

## 14. TRANSPORT INFORMATION

**DOT HAZARD CLASS** Not regulated.  
**TDGR CLASS** Not regulated.  
**SEA TRANSPORT NOTES** Not regulated per IMDG.  
**AIR TRANSPORT NOTES** Not regulated per IATA.

## 15. REGULATORY INFORMATION

### US FEDERAL REGULATIONS

COMPONENT	SARA 302	CERCLA	SARA 313
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	No	No	No
LITHIUM STEARATE SOAP GREASE THICKENER	No	No	No
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	No	***	N982 - Zn
1-PROPENE-2-METHYL, SULFURIZED	No	No	No
1H-IMIDAZOLE-1-ETHANOL, 4,5-DIHYDRO-, 2-ALKYL DERIVS. (CAS# 95-38-5, 21652-27-7, OR 61791-39-7)	No	No	No

**REGULATORY STATUS** \*\*\* Indicates that no RQ is assigned to this generic or broad class, although the class is a CERCLA hazardous substance. See 50 Federal Register 13456 (April 4, 1985). Values in Section 313 column represent Category Codes for reporting under Section 313.

### CLEAN AIR ACT

COMPONENT	CAA Accidental Release Prevention
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	No
LITHIUM STEARATE SOAP GREASE THICKENER	No
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	No

**SARA HAZARD CATEGORIES** Acute Chronic

### US STATE REGULATIONS

COMPONENT	CA	MA	FL	MN	NJ	PA	RI
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	No	No	No	No	No	No	No
LITHIUM STEARATE SOAP GREASE THICKENER	No	No	No	No	No	No	No
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	No	No	Yes	Yes	Yes	EH	No

**STATE REGULATORY STATUS** CALIFORNIA PROPOSITION 65: This product \*\*\*DOES NOT\*\*\* contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer or reproductive toxicity, and for which warnings are now required.

PENNSYLVANIA RIGHT-TO-KNOW: This product contains the following chemicals that



the state of Pennsylvania has identified as Special Hazardous Substances (SHS), Environmental Hazards (EH), or both (ESHS). The PA regulations require that the MSDS identify all SHS or EH chemicals by chemical name, common name, and CAS Number if they comprise 0.01% or more. CAS#68649-42-3, see sec. #2.

### WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM - WHMIS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

#### LABEL(S) FOR SUPPLY



#### CONTROLLED PRODUCT CLASSIFICATION

D2B - Irritating and/or Chronically Toxic Materials

#### Risk phrases

Risk Phrases Applicable in the European Union (EU):  
 Classification per manufacturer.  
 R-22 Harmful if swallowed.  
 R-38 Irritating to skin.  
 R-51/53 Toxic to aquatic organisms, may cause long-term adverse effect in the aquatic environment.  
 Xi  
 Xn

#### GLOBAL INVENTORIES

COMPONENT	CAN	US	EU	AUS	JAP	KOR	PHLP	CHN
LUBRICATING OILS, PETROLEUM, BASE OILS, HIGHLY REFINED	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
LITHIUM STEARATE SOAP GREASE THICKENER	Yes	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
1-PROPENE-2-METHYL, SULFURIZED	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes
1H-IMIDAZOLE-1-ETHANOL, 4,5-DIHYDRO-, 2-ALKYL DERIVS. (CAS# 95-38-5, 21652-27-7, OR 61791-39-7)	DSL	Yes	EINECS	Yes	Yes	Yes	Yes	Yes

#### USA (TSCA)

All components in this product are listed on the US Toxic Substances Control Act (TSCA) Inventory or are exempt from TSCA Inventory requirements.

#### CANADA (DSL)

All components in this product are listed on the Canada Domestic Substances List (DSL) or are exempt from DSL requirements.

#### EUROPE (EINECS/ELINCS/NLP)

All components in this product are listed on the European Inventory of New and Existing Chemical Substances (EINECS), the European List of Notified Chemical Substances (ELINCS), or the No Longer Polymers (NLP) list, or are exempt from EU listing requirements.

#### JAPAN (ENCS)

All components in this product are listed on the Japan Inventory of Existing and New Chemical Substances (ENCS) or are exempt from ENCS requirements.

#### PHILIPPINES (PICCS)

All components in this product are listed on the Philippines Inventory of Chemicals and Chemical Substances (PICCS) or are exempt from PICCS requirements.

#### KOREA (ECL)

All components in this product are listed on the Korea Existing Chemicals List (ECL) or

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are exempt from KECL requirements.

**CHINA (IECS)**

All components in this product are listed on the China Inventory of Existing Chemical Substances (IECS) or are exempt from IECS requirements.

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**16. OTHER INFORMATION**

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## NFPA-HMIS HAZARD RATING

**HEALTH**

Temporary incapacitation, injury (2) - HMIS/NFPA

**FLAMMABILITY**

Burns only if pre-heated (1) - HMIS/NFPA

**REACTIVITY**

Normally Stable (0) - HMIS/NFPA

**NPCA HMIS HAZARD INDEX**

Moderate: Moderately Toxic - May be harmful if inhaled or absorbed (2).

**PERSONAL PROTECTION INDEX**

B - Safety Eyewear and Gloves

**NPCA HMIS FLAMMABILITY INDEX**

Burns only if pre-heated (1).

**NPCA HMIS REACTIVITY INDEX**

Normally stable (0).

**Tariff Code (Schedule B)**

2710.19.3750 Lubricating greases, with or without additives.

**PREPARED BY**

Lumax

**DATE**

2011-02-17

**DISCLAIMER**

While the information and recommendations set forth herein are believed to be accurate as of the date thereof, the company makes no warranty with respect thereto and disclaims all liability from reliance therein.

\* Information revised since previous MSDS version

**PRINTING DATE:**

2011-02-17



# SAFETY DATA SHEET

Revision Date 28-May-2015

Version 1

## 1. IDENTIFICATION

### Product identifier

**Product Name** 765-1150 NAPA LUBRIGARD ANTI-SEIZE COMPOUND (PTX81464) 8.5 OZ

### Other means of identification

**Product Code** 21113

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Aerosol Lubricant

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### Manufacturer Address

ITW Permatex  
10 Columbus Blvd.  
Hartford, CT 06106 USA

#### Distributor

ITW Permatex Canada  
35 Brownridge Road, Unit 1  
Halton Hills, ON Canada L7G 0C6  
Telephone: (800) 924-6994

**Company Phone Number** 1-87-Permatex  
(877) 376-2839

**24 Hour Emergency Phone Number** Chem-Tel: 800-255-3924  
International Emergency:  
00+1+ 813-248-0585  
Contract Number: MIS0003453

**E-mail address** mail@permatex.com

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Aspiration toxicity	Category 1
Flammable aerosols	Category 1

### Label elements

#### Emergency Overview

#### **Danger**

Causes skin irritation  
Causes serious eye irritation  
May cause drowsiness or dizziness  
May be fatal if swallowed and enters airways  
Extremely flammable aerosol



**Appearance** Gray

**Physical state** Liquid Aerosol

**Odor** Solvent

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Wear eye/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
Do not spray on an open flame or other ignition source  
Pressurized container: Do not pierce or burn, even after use

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
Specific treatment (see supplemental first aid instructions on this label)  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention  
IF ON SKIN: Wash with plenty of soap and water  
If skin irritation occurs: Get medical advice/attention  
Take off contaminated clothing and wash before reuse  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up  
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Toxic to aquatic life with long lasting effects. The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. This note applies only to certain complex oil derived substances in Annex I.

Unknown acute toxicity                      17.5 % of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**substance(s)**

Chemical Name	CAS No	Weight-%	Trade Secret
ACETONE	67-64-1	10 - 30	*
HEPTANE	142-82-5	10 - 30	*
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC	64742-52-5	10 - 30	*
CALCIUM OXIDE	1305-78-8	7 - 13	*

ALUMINIUM POWDER	7429-90-5	5 - 10	*
GRAPHITE	7782-42-5	3 - 7	*
CARBON DIOXIDE	124-38-9	1 - 5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

<b>General advice</b>	Get medical advice/attention if you feel unwell.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Skin contact</b>	IF ON SKIN: Wash skin with soap and water. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
<b>Ingestion</b>	IF SWALLOWED: Call a physician or poison control center immediately. Do NOT induce vomiting.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

##### Most important symptoms and effects, both acute and delayed

**Symptoms** See section 2 for more information.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>), Dry chemical, Foam

##### Unsuitable extinguishing media

Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

Extremely flammable. Keep product and empty container away from heat and sources of ignition. Vapors may travel to source of ignition and flash back.

##### Explosion data

**Sensitivity to Mechanical Impact** None.  
**Sensitivity to Static Discharge** None.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Contents under pressure. Do not puncture or incinerate cans.

**Environmental precautions**

**Environmental precautions** See Section 12 for additional ecological information. Do not flush into surface water or sanitary sewer system.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Eliminate all ignition sources if safe to do so. Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required. Take precautionary measures against static discharges. Do not puncture or incinerate cans. Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

**Incompatible materials** Strong oxidizing agents

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
ACETONE 67-64-1	STEL: 750 ppm TWA: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m <sup>3</sup> (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m <sup>3</sup> (vacated) STEL: 2400 mg/m <sup>3</sup> The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m <sup>3</sup>
HEPTANE 142-82-5	STEL: 500 ppm TWA: 400 ppm	TWA: 500 ppm TWA: 2000 mg/m <sup>3</sup> (vacated) TWA: 400 ppm (vacated) TWA: 1600 mg/m <sup>3</sup> (vacated) STEL: 500 ppm (vacated) STEL: 2000 mg/m <sup>3</sup>	IDLH: 750 ppm Ceiling: 440 ppm 15 min Ceiling: 1800 mg/m <sup>3</sup> 15 min TWA: 85 ppm TWA: 350 mg/m <sup>3</sup>
CALCIUM OXIDE 1305-78-8	TWA: 2 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup> not in effect as a result of reconsideration	IDLH: 25 mg/m <sup>3</sup> TWA: 2 mg/m <sup>3</sup>
ALUMINIUM POWDER 7429-90-5	TWA: 1 mg/m <sup>3</sup> respirable fraction	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 5 mg/m <sup>3</sup> Al Aluminum	TWA: 5 mg/m <sup>3</sup> Al

GRAPHITE 7782-42-5	TWA: 2 mg/m <sup>3</sup> respirable fraction all forms except graphite fibers	TWA: 15 mg/m <sup>3</sup> total dust synthetic TWA: 5 mg/m <sup>3</sup> respirable fraction synthetic (vacated) TWA: 2.5 mg/m <sup>3</sup> respirable dust natural (vacated) TWA: 10 mg/m <sup>3</sup> total dust synthetic (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup> natural respirable dust
CARBON DIOXIDE 124-38-9	STEL: 30000 ppm TWA: 5000 ppm	TWA: 5000 ppm TWA: 9000 mg/m <sup>3</sup> (vacated) TWA: 10000 ppm (vacated) TWA: 18000 mg/m <sup>3</sup> (vacated) STEL: 30000 ppm (vacated) STEL: 54000 mg/m <sup>3</sup>	IDLH: 40000 ppm TWA: 5000 ppm TWA: 9000 mg/m <sup>3</sup> STEL: 30000 ppm STEL: 54000 mg/m <sup>3</sup>

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems

**Individual protection measures, such as personal protective equipment**

- Eye/face protection** Wear safety glasses with side shields (or goggles).
- Skin and body protection** Wear protective gloves and protective clothing.
- Respiratory protection** Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

**Physical state** Liquid; Aerosol  
**Appearance** Gray  
**Odor** Solvent  
**Odor threshold** No information available

<u>Property</u>	<u>Values</u>
pH	No information available
Melting point / freezing point	No information available
Boiling point / boiling range	No information available
Flash point	< -18 °C / < 0 °F
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	>1

**Remarks • Method**

Gives a flame projection at full valve opening or flashback at any degree of valve opening

Air = 1

Relative density	0.885-0.905
Water solubility	Insoluble in water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Dynamic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available

**Other Information**

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	24.5%
Density	No information available
Bulk density	No information available

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Heat, flames and sparks.

**Incompatible materials**

Strong oxidizing agents

**Hazardous Decomposition Products**

Carbon oxides  
Copper compounds

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

<b>Inhalation</b>	May cause irritation of respiratory tract. May cause drowsiness or dizziness.
<b>Eye contact</b>	Contact with eyes may cause irritation. May cause redness and tearing of the eyes.
<b>Skin contact</b>	May cause skin irritation and/or dermatitis.
<b>Ingestion</b>	Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
ACETONE 67-64-1	= 5800 mg/kg ( Rat )	-	= 50100 mg/m <sup>3</sup> ( Rat ) 8 h
HEPTANE 142-82-5	-	= 3000 mg/kg ( Rabbit )	= 103 g/m <sup>3</sup> ( Rat ) 4 h
CALCIUM OXIDE 1305-78-8	= 500 mg/kg ( Rat )	-	-



**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC 64742-52-5	A2	Group 1	-	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Target Organ Effects** Central nervous system, Central Vascular System (CVS), Eyes, Respiratory system, Skin.

The following values are calculated based on chapter 3.1 of the GHS document .

**ATEmix (oral)** 3394 mg/kg

**ATEmix (dermal)** 12375 mg/kg

**ATEmix (inhalation-dust/mist)** 186 mg/l

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
ACETONE 67-64-1	-	4.74 - 6.33: 96 h Oncorhynchus mykiss mL/L LC50 6210 - 8120: 96 h Pimephales promelas mg/L LC50 static 8300: 96 h Lepomis macrochirus mg/L LC50	10294 - 17704: 48 h Daphnia magna mg/L EC50 Static 12600 - 12700: 48 h Daphnia magna mg/L EC50
HEPTANE 142-82-5	-	375.0: 96 h Cichlid fish mg/L LC50	10: 24 h Daphnia magna mg/L EC50
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTHENIC 64742-52-5	-	5000: 96 h Oncorhynchus mykiss mg/L LC50	1000: 48 h Daphnia magna mg/L EC50
CALCIUM OXIDE 1305-78-8	-	1070: 96 h Cyprinus carpio mg/L LC50 static	-

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

Chemical Name	Partition coefficient
ACETONE 67-64-1	-0.24
HEPTANE 142-82-5	4.66

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated packaging** Do not reuse container.

**US EPA Waste Number** D001

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
ACETONE 67-64-1	-	Included in waste stream: F039	-	U002

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
ACETONE 67-64-1	Ignitable
HEPTANE 142-82-5	Toxic Ignitable
CALCIUM OXIDE 1305-78-8	Corrosive
ALUMINIUM POWDER 7429-90-5	Ignitable powder

**14. TRANSPORT INFORMATION**

**DOT**

**UN/ID no** 1950  
**Proper shipping name:** Aerosols, Limited Quantity (LQ)  
**Hazard Class** 2.1  
**Emergency Response Guide Number** 126

**IATA**

**UN/ID no** ID 8000  
**Proper shipping name:** Consumer commodity  
**Hazard Class** 9  
**ERG Code** 9L

**IMDG**

**UN/ID no** 1950  
**Proper shipping name:** Aerosols, Limited Quantity (LQ)  
**Hazard Class** 2.1  
**EmS-No** F-D, S-U

**15. REGULATORY INFORMATION**

**International Inventories**

**TSCA** Complies  
**DSL/NDSL** Complies  
**EINECS/ELINCS** Complies  
**ENCS** Not Listed. Contains: Natural substance(s)  
**IECSC** Complies  
**KECL** Complies  
**PICCS** Complies

AICS Complies

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
 DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List  
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
 ENCS - Japan Existing and New Chemical Substances  
 IECSC - China Inventory of Existing Chemical Substances  
 KECL - Korean Existing and Evaluated Chemical Substances  
 PICCS - Philippines Inventory of Chemicals and Chemical Substances  
 AICS - Australian Inventory of Chemical Substances

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
ALUMINIUM POWDER - 7429-90-5	1.0

**SARA 311/312 Hazard Categories**

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
ACETONE 67-64-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
ACETONE 67-64-1	X	X	X
HEPTANE 142-82-5	X	X	X
CALCIUM OXIDE 1305-78-8	X	X	X
ALUMINIUM POWDER 7429-90-5	X	X	X
GRAPHITE 7782-42-5	X	X	X
CARBON DIOXIDE 124-38-9	X	X	X

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

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<b>NFPA</b>	<b>Health hazards</b> 2	<b>Flammability</b> 4	<b>Instability</b> 0	-
<b>HMIS</b>	<b>Health hazards</b> 2	<b>Flammability</b> 4	<b>Physical hazards</b> 0	<b>Personal protection</b> B

NFPA (National Fire Protection Association)  
HMIS (Hazardous Material Information System)

**Revision Date** 28-May-2015

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

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NAPA® MPURP WHEEL BEARING GREASE GREASE		Version: 1.0
NP75601		

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® MPURP WHEEL BEARING GREASE  
GREASE

### Recommended use of the chemical and restrictions on use

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC	64742-65-0	Asp. Tox. 1; H304	74.99

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ASPHALT	8052-42-4	Not a hazardous substance or mixture.	24.99
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA	64742-52-5	Not a hazardous substance or mixture.	9.99

#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.
- Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)
- Notes to physician : No hazards which require special first aid measures.

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## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
sulfur oxides  
Hydrocarbons  
Aldehydes  
Ketones  
Nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides
- Specific extinguishing methods :  
  
Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

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## SECTION 7. HANDLING AND STORAGE

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- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : No materials to be especially mentioned.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC	64742-65-0	REL	500 ppm 2,000 mg/m3	OSHA_TRANS
		REL	5 mg/m3 Mist.	NIOSH/GUIDE
		STEL	10 mg/m3 Mist.	NIOSH/GUIDE
		REL	5 mg/m3 Mist.	OSHA_TRANS
		TWA	5 mg/m3 Mist.	Z1A
		TWA	400 ppm 1,600 mg/m3	Z1A
		ASPHALT	8052-42-4	TWA
Ceil_Time	5 mg/m3 Fume.			NIOSH/GUIDE
REL	5 mg/m3 Mist.			NIOSH/GUIDE
DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA	64742-52-5	REL	500 ppm 2,000 mg/m3	OSHA_TRANS
		REL	5 mg/m3 Mist.	NIOSH/GUIDE
		STEL	10 mg/m3 Mist.	NIOSH/GUIDE
		REL	5 mg/m3 Mist.	OSHA_TRANS

- Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure



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guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

#### Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.
- Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).
- Hygiene measures : General industrial hygiene practice.

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#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : gel
- Physical state : liquid
- Colour : red
- Odour : No data available
- Odour Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available  
: 640 °F / 338 °C
- Flash point : 471 °F / 244 °C
- Evaporation rate : No data available
- Flammability (solid, gas) : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : < 0.01 mmHg (20 °C)

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Relative vapour density : No data available

Relative density : 0.95 (15.6 °C)

Density : 0.90 g/cm<sup>3</sup> (20 °C)

Solubility(ies)

Water solubility : negligible

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : > 315 °C

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : > 20.5 mm<sup>2</sup>/s (40 °C)

Oxidizing properties : No data available

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
Hydrocarbons  
Sulphur oxides

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## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin contact

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Eye Contact  
Ingestion

**Acute toxicity**

Not classified based on available information.

**Product:**

Acute oral toxicity : Acute toxicity estimate (Rat): 3,019 mg/kg

Acute dermal toxicity : Acute toxicity estimate (Rabbit): 169,492 mg/kg

**Components:**

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Acute oral toxicity : LD 50 (Rat): > 5 g/kg

Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: Not classified as acutely toxic by inhalation under GHS.

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg

Assessment: Not classified as acutely toxic by dermal absorption under GHS.

Remarks: No mortality observed at this dose.

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: Not irritating to skin

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Result: Mildly irritating to skin

ASPHALT:

Result: Not irritating to skin

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Species: Rabbit

Result: Not irritating to skin

**Serious eye damage/eye irritation**

Not classified based on available information.

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**Product:**

Result: Not irritating to eyes

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

Result: Mildly irritating to eyes

ASPHALT:

Result: Possibly irritating to eyes

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Species: Rabbit

Result: Mildly irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Components:**

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Components:**

DISTILLATES (PETROLEUM), SOLVENT-DEWAXED HEAVY PARAFFINIC:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

Group 2B: Possibly carcinogenic to humans

ASPHALT

8052-42-4

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**OSHA** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l  
 Exposure time: 96 h  
 Test Type: static test  
 Test substance: WAF  
 Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 10,000 mg/l  
 Exposure time: 48 h  
 Test Type: static test  
 Test substance: WAF  
 Method: OECD Test Guideline 202

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l  
 End point: Growth inhibition  
 Exposure time: 72 h  
 Test Type: static test  
 Test substance: WAF  
 Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL (Daphnia (water flea)): 10 mg/l  
 Exposure time: 21 d  
 Test Type: semi-static test  
 Test substance: WAF  
 Method: OECD Test Guideline 211

### Persistence and degradability

DISTILLATES (PETROLEUM), HYDROTREATED HEAVY NAPHTA:

Biodegradability : Result: Inherently biodegradable  
 Biodegradation: 31 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301F

### Bioaccumulative potential

No data available

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**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

**U.S. DOT - ROAD**

Not dangerous goods
---------------------

**U.S. DOT - RAIL**

Not dangerous goods
---------------------

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods
---------------------

**TRANSPORT CANADA - ROAD**

Not dangerous goods
---------------------

**TRANSPORT CANADA - RAIL**

Not dangerous goods
---------------------

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods
---------------------

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**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods

**\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine pollutant	no
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Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION**

- SARA 311/312 Hazards** : No SARA Hazards
- SARA 313 Component(s)** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
- SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
- California Prop 65** : Proposition 65 warnings are not required for this product based on the results of a risk assessment.
- The components of this product are reported in the following inventories:**
- TSCA** : On TSCA Inventory
- AUSTR** : On the inventory, or in compliance with the inventory
- DSL** : All components of this product are on the Canadian DSL.
- ENCS** : On the inventory, or in compliance with the inventory
- KECL** : On the inventory, or in compliance with the inventory

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PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**SECTION 16. OTHER INFORMATION**

**Further information**

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<b>NFPA:</b>	<b>HMIS III:</b>						
<p>Flammability</p> <p>Health: 1, Flammability: 1, Instability: 0, Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>1</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>PHYSICAL HAZARD</b></td> <td><b>0</b></td> </tr> </table> <p>0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

**NFPA Flammable and Combustible Liquids Classification**  
Combustible Liquid Class IIIB

**Full text of H-Statements referred to under sections 2 and 3.**

H304 May be fatal if swallowed and enters airways.

Sources of key data used to compile the Safety Data Sheet

Ashland internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).



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List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists  
 BEI : Biological Exposure Index  
 CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
 CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
 FG : Food grade  
 GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
 H-statement : Hazard Statement  
 IATA : International Air Transport Association.  
 IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization  
 ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"  
 IMDG : International Maritime Code for Dangerous Goods  
 ISO : International Organization for Standardization  
 logPow : octanol-water partition coefficient  
 LCxx : Lethal Concentration, for xx percent of test population  
 LDxx : Lethal Dose, for xx percent of test population.  
 ICxx : Inhibitory Concentration for xx of a substance  
 Ecxx : Effective Concentration of xx  
 N.O.S.: Not Otherwise Specified  
 OECD : Organization for Economic Co-operation and Development  
 OEL : Occupational Exposure Limit  
 P-Statement : Precautionary Statement  
 PBT : Persistent , Bioaccumulative and Toxic  
 PPE : Personal Protective Equipment  
 STEL : Short-term exposure limit  
 STOT : Specific Target Organ Toxicity  
 TLV : Threshold Limit Value  
 TWA : Time-weighted average  
 vPvB : Very Persistent and Very Bioaccumulative  
 WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT : Department of Transportation  
 FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act  
 HMIRC : Hazardous Materials Information Review Commission  
 HMIS : Hazardous Materials Identification System  
 NFPA : National Fire Protection Association  
 NIOSH : National Institute for Occupational Safety and Health  
 OSHA : Occupational Safety and Health Administration  
 PMRA : Health Canada Pest Management Regulatory Agency  
 RTK : Right to Know  
 WHMIS : Workplace Hazardous Materials Information System

















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NAPA® PREM PERF SYN SAE 10W-30 SYNTHETIC MOTOR OIL		Version: 1.0
NP75500		

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® PREM PERF SYN SAE 10W-30  
SYNTHETIC MOTOR OIL

### Recommended use of the chemical and restrictions on use

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	Eye Irrit. 2A; H319	6.21

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#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : No symptoms known or expected.
- Notes to physician : No hazards which require special first aid measures.

---

#### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons
- Specific extinguishing methods :  
  
Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.

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Special protective equipment : In the event of fire, wear self-contained breathing apparatus.  
for firefighters

---

## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

---

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : No materials to be especially mentioned.

---

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Eye protection : Not required under normal conditions of use. Wear splash-

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proof safety goggles if material could be misted or splashed into eyes.

- Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).
- Hygiene measures : General industrial hygiene practice.

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : liquid
- Colour : amber
- Odour : No data available
- Odour Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available
- Boiling point/boiling range : 662 °F / 350 °C  
(1,013.333333 hPa)  
Calculated Phase Transition Liquid/Gas
- Flash point : > 390 °F / > 199 °C  
Method: Cleveland open cup
- Evaporation rate : No data available
- Flammability (solid, gas) : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : 0.1333333 hPa (20 °C)  
Calculated Vapor Pressure
- Relative vapour density : No data available
- Relative density : 0.853 (60.00 °F)
- Density : 0.8527 g/cm<sup>3</sup> (15.56 °C)
- Solubility(ies)  
Water solubility : negligible

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Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity  
Viscosity, dynamic : No data available

Viscosity, kinematic : 10.7 mm<sup>2</sup>/s

Oxidizing properties : No data available

---

#### SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : No hazardous decomposition products are known.

---

#### SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

**Acute toxicity**

Not classified based on available information.

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Not irritating to skin

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**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:  
Result: Irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

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**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

**SECTION 14. TRANSPORT INFORMATION****International transport regulations****REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

**U.S. DOT - ROAD**

Not dangerous goods
---------------------

**U.S. DOT - RAIL**

Not dangerous goods
---------------------

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods
---------------------

**TRANSPORT CANADA - ROAD**

Not dangerous goods
---------------------

**TRANSPORT CANADA - RAIL**

Not dangerous goods
---------------------

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods
---------------------

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**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
------------------	----

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : No SARA Hazards

**US State Regulations**

**Pennsylvania Right To Know**

PETROLEUM DISTILLATES	254504001-6042	90.00 - 100.00
-----------------------	----------------	----------------

The identity of one or more component(s) is being withheld under business confidentiality.

HEAVY PARAFFINIC DISTILLATE	64742-54-7	5.00 - 10.00 %
-----------------------------	------------	----------------

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	5.00 - 10.00 %
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**New Jersey Right To Know**

PETROLEUM DISTILLATES	254504001-6042	90.00 - 100.00
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The identity of one or more component(s) is being withheld under business confidentiality.

HEAVY PARAFFINIC DISTILLATE	64742-54-7	5.00 - 10.00 %
Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	5.00 - 10.00 %
POLYOLEFIN AMIDE ALKENEAMINE	Not Assigned	1.00 - 5.00 %
LUBRICANT ADDITIVE	Not Assigned	1.00 - 5.00 %

**California Prop 65** Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

TSCA	: On TSCA Inventory
DSL	: All components of this product are on the Canadian DSL.
AUSTR	: On the inventory, or in compliance with the inventory
NZIOC	: Not in compliance with the inventory
ENCS	: Not in compliance with the inventory
KECL	: On the inventory, or in compliance with the inventory
PICCS	: On the inventory, or in compliance with the inventory
IECSC	: q (quantity restricted)

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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## SECTION 16. OTHER INFORMATION

### Further information

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<b>NFPA:</b>	<b>HMIS III:</b>						
<p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>1</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>PHYSICAL HAZARD</b></td> <td><b>0</b></td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

### NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

### Full text of H-Statements referred to under sections 2 and 3.

H319 Causes serious eye irritation.

Sources of key data used to compile the Safety Data Sheet

Ashland internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

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IATA-DGR : Dangerous Goods Regulation by the “International Air Transport Association” (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the “International Civil Aviation Organization”

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System

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29 CFR 1910.1200 (OSHA HazCom 2012)

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product identifier**

Trade name : NAPA® PREM PERF SYN SAE 5W-20 SYNTHETIC MOTOR OIL

**Recommended use of the chemical and restrictions on use**

<p><b>Details of the supplier of the safety data sheet</b>          Ashland          P.O. Box 2219          Columbus, OH 43216          United States of America</p> <p>EHS Customer Requests@ashland.com</p>	<p><b>Emergency telephone number</b>          1-800-ASHLAND (1-800-274-5263)</p> <p><b>Regulatory Information Number</b>          1-800-325-3751</p> <p><b>Product Information</b>          614-790-3333</p>
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**SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification**

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

**GHS Label element**

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Defatter

**Hazardous components**

Chemical Name	CAS-No.	Classification	Concentration (%)
HEAVY PARAFFINIC DISTILLATE	64742-54-7	Asp. Tox. 1; H304	28.24

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Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	Eye Irrit. 2A; H319	6.22
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#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.  
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
acne  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)
- Notes to physician : No hazards which require special first aid measures.

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#### SECTION 5. FIREFIGHTING MEASURES

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- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO2)  
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons
- Specific extinguishing methods :
- Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

---

## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

---

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : No materials to be especially mentioned.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : amber

Odour : mild

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : Estimated 626 °F / 330 °C

Flash point : > 390 °F / > 199 °C  
Method: Closed Cup

Evaporation rate : < 1  
Ethyl Ether

Flammability (solid, gas) : No data available

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Upper explosion limit : 6 %(V)  
Calculated Explosive Limit

Lower explosion limit : 1 %(V)  
Calculated Explosive Limit

Vapour pressure : 0.1333333 hPa (20 °C)  
Calculated Vapor Pressure

Relative vapour density : > 1AIR=1

Relative density : No data available

Density : 0.849 g/cm3

Solubility(ies)  
Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity  
Viscosity, dynamic : No data available

Viscosity, kinematic : ca. 50 mm2/s (40 °C)

Oxidizing properties : No data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
Hydrocarbons

---

## SECTION 11. TOXICOLOGICAL INFORMATION



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Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

**Acute toxicity**

Not classified based on available information.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Acute oral toxicity : LD 50 (Rat): > 15 g/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5 g/kg

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Not irritating to skin

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Result: Not irritating to eyes

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

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**Product:**

No aspiration toxicity classification

**Components:**

HEAVY PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Toxicity to fish : LL50 (Fish): > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates : EL50 (Aquatic invertebrates): > 10,000 mg/l

Toxicity to algae : EL50 (Algae, algal mat (Algae)): > 100 mg/l

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 10 mg/l

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Aquatic invertebrates): 10 mg/l

**Persistence and degradability**

**Components:**

No data available

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**Bioaccumulative potential**

**Components:**

No data available

**Mobility in soil**

**Components:**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

**Components:**

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

**U.S. DOT - ROAD**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TRANSPORT CANADA - ROAD**

Not dangerous goods

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**TRANSPORT CANADA - RAIL**

Not dangerous goods

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods

**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
------------------	----

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313 Component(s)SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Pennsylvania Right To Know**

HYDROTREATED HEAVY PARAFFINIC BASE OIL	64742-54-7	50.00 - 70.00 %
HEAVY PARAFFINIC DISTILLATE	64742-54-7	20.00 - 30.00 %

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Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts      90194-32-4      5.00 - 10.00 %

HEAVY PARAFFINIC DISTILLATE      64742-54-7      1.00 - 5.00 %

**New Jersey Right To Know**

HYDROTREATED HEAVY PARAFFINIC BASE OIL      64742-54-7      50.00 - 70.00 %

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HEAVY PARAFFINIC DISTILLATE      64742-54-7      1.00 - 5.00 %

LUBRICANT ADDITIVE      Not Assigned      1.00 - 5.00 %

**California Prop 65**

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL.
- AUSTR : On the inventory, or in compliance with the inventory
- ENCS : Not in compliance with the inventory
- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : q (quantity restricted)

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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## SECTION 16. OTHER INFORMATION

### Further information

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<b>NFPA:</b>	<b>HMIS III:</b>						
<p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>1</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>PHYSICAL HAZARD</b></td> <td><b>0</b></td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
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<b>FLAMMABILITY</b>	<b>1</b>						
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### NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

### Full text of H-Statements referred to under sections 2 and 3.

H304 May be fatal if swallowed and enters airways.  
H319 Causes serious eye irritation.

Sources of key data used to compile the Safety Data Sheet  
Ashland internal data including own and sponsored test reports  
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The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

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BEI : Biological Exposure Index  
CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
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H-statement : Hazard Statement

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IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System

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29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® PREM PERF SYN SAE 5W-30  
SYNTHETIC MOTOR OIL

### Recommended use of the chemical and restrictions on use

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
HEAVY PARAFFINIC DISTILLATE	64742-54-7	Asp. Tox. 1; H304	26.23



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Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	Eye Irrit. 2A; H319	6.22
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#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.  
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
acne  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)
- Notes to physician : No hazards which require special first aid measures.

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#### SECTION 5. FIREFIGHTING MEASURES

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- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO2)  
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons
- Specific extinguishing methods :
- Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : No materials to be especially mentioned.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : amber

Odour : mild

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Boiling point/boiling range : 626 °F / 330 °C  
(1,013.333333 hPa)  
Calculated Phase Transition Liquid/Gas

Flash point : > 390 °F / > 199 °C  
Method: Cleveland open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

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Upper explosion limit : 6 %(V)  
Calculated Explosive Limit

Lower explosion limit : 1 %(V)  
Calculated Explosive Limit

Vapour pressure : 1.3333333 hPa (20 °C)  
Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : No data available

Density : 0.8473 g/cm3

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : 63.17 mm2/s (40 °C)

Oxidizing properties : No data available

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
Hydrocarbons

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## SECTION 11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

**Acute toxicity**

Not classified based on available information.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Acute oral toxicity : LD 50 (Rat): > 15 g/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5 g/kg

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Not irritating to skin

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Result: Not irritating to eyes

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

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**Product:**

No aspiration toxicity classification

**Components:**

HEAVY PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Components:**

HEAVY PARAFFINIC DISTILLATE:

Toxicity to fish : LL50 (Fish): > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates : EL50 (Aquatic invertebrates): > 10,000 mg/l

Toxicity to algae : EL50 (Algae, algal mat (Algae)): > 100 mg/l

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 10 mg/l

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Aquatic invertebrates): 10 mg/l

**Persistence and degradability**

**Components:**

No data available

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**Bioaccumulative potential**

**Components:**

No data available

**Mobility in soil**

**Components:**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

**Components:**

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

**U.S. DOT - ROAD**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TRANSPORT CANADA - ROAD**

Not dangerous goods

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Marine pollutant	no
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## SECTION 16. OTHER INFORMATION

### Further information

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<p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>1</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>PHYSICAL HAZARD</b></td> <td><b>0</b></td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
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OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System

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29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® PREMIUM CONVENTIONAL SAE 80W-85W-90 GEAR OIL

### Recommended use of the chemical and restrictions on use


<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
--	---

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Skin irritation : Category 2  
 Eye irritation : Category 2A  
 Skin sensitization : Category 1

### GHS Label element

Hazard pictograms : 

Signal Word : Warning

Hazard Statements : Causes skin irritation.  
 May cause an allergic skin reaction.  
 Causes serious eye irritation.

Precautionary Statements : If medical advice is needed, have product container or label at hand.  
 Keep out of reach of children.  
 Read label before use.

### Prevention:

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Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
Wash skin thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear eye protection/ face protection.  
Wear protective gloves.  
**Response:**  
IF ON SKIN: Wash with plenty of soap and water.  
IF IN EYES: Rinse cautiously with water for several minutes.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
If skin irritation or rash occurs: Get medical advice/ attention.  
If eye irritation persists: Get medical advice/ attention.  
Take off contaminated clothing and wash before reuse.  
**Disposal:**  
Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Defatter

**Hazardous components**

Chemical Name	CAS-No.	Classification	Concentration (%)
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-62-7	Not a hazardous substance or mixture.	21.10
MINERAL OIL		Not a hazardous substance or mixture.	1.39
ALKYL PHOSPHATE		Skin Corr. 1B; H314  Eye Dam. 1; H318  STOT SE 3; H335	1.02
LONG-CHAIN ALKYL AMINE		Acute Tox. 4; H302  Acute Tox. 2; H330  Acute Tox. 3; H311	0.34

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		Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	
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#### SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.  
If on skin, rinse well with water.  
Wash contaminated clothing before re-use.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)  
Dizziness  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.

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Notes to physician : No hazards which require special first aid measures.

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## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons  
Oxides of phosphorus
- Specific extinguishing methods :  
  
Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

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## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapours/dust.  
Do not smoke.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.  
Container hazardous when empty.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Electrical installations / working materials must comply with the technological safety standards.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-62-7	REL	500 ppm 2,000 mg/m <sup>3</sup>	OSHA_TRANS
		REL	5 mg/m <sup>3</sup> Mist.	NIOSH/GUIDE
		STEL	10 mg/m <sup>3</sup> Mist.	NIOSH/GUIDE
MINERAL OIL		REL	5 mg/m <sup>3</sup> Mist.	OSHA_TRANS
		REL	5 mg/m <sup>3</sup> Mist.	NIOSH/GUIDE
		STEL	10 mg/m <sup>3</sup> Mist.	NIOSH/GUIDE
		REL	5 mg/m <sup>3</sup> Mist.	OSHA_TRANS
		TWA	5 mg/m <sup>3</sup>	TN OEL



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		TWA	Mist. 5 mg/m3 Inhalable fraction.	ACGIH
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**Engineering measures** : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

**Personal protective equipment**

Hand protection

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.

Skin and body protection : Wear as appropriate:  
 impervious clothing  
 Safety shoes  
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
 Discard gloves that show tears, pinholes, or signs of wear.  
 Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.  
 When using do not eat or drink.  
 When using do not smoke.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Physical state : liquid
- Colour : amber
- Odour : No data available
- Odour Threshold : No data available
- pH : No data available
- : No data available
- Boiling point/boiling range : > 424.9 °F / 218.3 °C  
(1013.333 hPa)
- Flash point : > 432 °F / > 222 °C  
Method: Cleveland open cup
- Evaporation rate : > 1

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Ethyl Ether

- Flammability (solid, gas) : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : < 0.1000000 mmHg
- Relative vapour density : > 1AIR=1
- Relative density : 0.89 (60.00 °F)
- Density : 0.8916 g/cm3 (15.56 °C)
- Solubility(ies)
  - Water solubility : No data available
  - Solubility in other solvents : No data available
- Partition coefficient: n-octanol/water : No data available
- Thermal decomposition : No data available
- Viscosity
  - Viscosity, dynamic : No data available
  - Viscosity, kinematic : 146 mm2/s (40 °C)
- Oxidizing properties : No data available

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**SECTION 10. STABILITY AND REACTIVITY**

- Reactivity : No decomposition if stored and applied as directed.
- Chemical stability : Stable under recommended storage conditions.
- Possibility of hazardous reactions : Product will not undergo hazardous polymerization.
- Incompatible materials : Strong oxidizing agents
- Hazardous decomposition products : carbon dioxide and carbon monoxide

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## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

### Acute toxicity

Not classified based on available information.

#### Components:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

LD 50 (Rat): > 5 g/kg

Acute inhalation toxicity : LC50 (Rat): > 5.58 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: Not classified as acutely toxic by inhalation under GHS.

Remarks: No mortality observed at this dose.

Acute dermal toxicity : LD 50 (Rabbit): > 5,000 mg/kg

Remarks: No mortality observed at this dose.

LD 50 (Rabbit): > 2,000 mg/kg

Assessment: Not classified as acutely toxic by dermal absorption under GHS.

LONG-CHAIN ALKYL AMINE:

Acute oral toxicity :

Assessment: The component/mixture is classified as acute oral toxicity, category 4.

Acute inhalation toxicity :

Assessment: The component/mixture is classified as acute inhalation toxicity, category 2.

Acute dermal toxicity :

Assessment: The component/mixture is classified as acute dermal toxicity, category 3.

### Skin corrosion/irritation

Causes skin irritation.

#### Product:

Remarks: May cause skin irritation and/or dermatitis.

Result: Repeated exposure may cause skin dryness or cracking.

#### Components:

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Species: Rabbit

Result: Not irritating to skin

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**MINERAL OIL:**

Result: Mildly irritating to skin

**ALKYL PHOSPHATE:**

Result: Corrosive to skin

**LONG-CHAIN ALKYL AMINE:**

Result: Corrosive after 3 minutes to 1 hour of exposure

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

**Components:**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Species: Rabbit

Result: Not irritating to eyes

**MINERAL OIL:**

Result: Mildly irritating to eyes

**ALKYL PHOSPHATE:**

Result: Corrosive to eyes

**LONG-CHAIN ALKYL AMINE:**

Result: Corrosive to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

**Components:**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Test Type: Buehler Test

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

**LONG-CHAIN ALKYL AMINE:**

Assessment: May cause sensitisation by skin contact.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**Components:**

ALKYL PHOSPHATE:

Assessment: May cause respiratory irritation.

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**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Components:**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

No aspiration toxicity classification

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

Group 1: Carcinogenic to humans

RESIDUAL OILS 64742-62-7  
(PETROLEUM), SOLVENT-  
DEWAXED

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

Known to be human carcinogen

RESIDUAL OILS 64742-62-7  
(PETROLEUM), SOLVENT-  
DEWAXED

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**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Components:**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l  
Exposure time: 96 h  
Test Type: static test  
Test substance: WAF  
Method: OECD Test Guideline 203  
Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 10,000 mg/l  
Exposure time: 48 h  
Test Type: static test  
Test substance: WAF

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Method: OECD Test Guideline 202

Toxicity to algae : NOEL (Pseudokirchneriella subcapitata (green algae)): >= 100 mg/l  
 End point: Growth inhibition  
 Exposure time: 72 h  
 Test Type: static test  
 Test substance: WAF  
 Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOELR (Oncorhynchus mykiss (rainbow trout)): Calculated >= 1,000 mg/l  
 Exposure time: 14 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL (Daphnia (water flea)): 10 mg/l  
 Exposure time: 21 d  
 Test substance: WAF  
 Method: OECD Test Guideline 211

LONG-CHAIN ALKYL AMINE:  
 Ecotoxicology Assessment  
 Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

**Persistence and degradability**

**Components:**

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC:

Biodegradability : Result: Not readily biodegradable.  
 Biodegradation: 2 - 4 %  
 Exposure time: 28 d  
 Method: OECD Test Guideline 301B

**Bioaccumulative potential**

**Components:**

No data available

**Mobility in soil**

**Components:**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Harmful to aquatic life with long lasting effects.

**Components:**

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### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

General advice : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Do not re-use empty containers.

### SECTION 14. TRANSPORT INFORMATION

#### International transport regulations

##### REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

#### MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

#### INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

#### INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

#### INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

#### TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

#### TRANSPORT CANADA - RAIL

Not dangerous goods
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**TRANSPORT CANADA - ROAD**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - ROAD**

Not dangerous goods

**\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID**

Marine pollutant

no

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION****SARA 311/312 Hazards** : Acute Health Hazard**US State Regulations****New Jersey Right To Know**

PETROLEUM DISTILLATE	254504001-5938	0.10 - 1.00
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The identity of one or more component(s) is being withheld under business confidentiality.

HEAVY PARAFFINIC DISTILLATE	64742-54-7	70.00 - 90.00 %
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DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-62-7	20.00 - 30.00 %
---	------------	-----------------

LUBRICANT ADDITIVE	Not Assigned	5.00 - 10.00 %
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MINERAL OIL	Not Assigned	1.00 - 5.00 %
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ALKYL PHOSPHATE

Not Assigned

1.00 - 5.00 %

**California Prop 65**

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL.
- AUSTR : On the inventory, or in compliance with the inventory
- ENCS : On the inventory, or in compliance with the inventory
- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**SECTION 16. OTHER INFORMATION**

**Further information**

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<p><b>NFPA:</b></p> <div style="text-align: center;"> <p>Flammability</p> <p>Health: 1, Flammability: 1, Instability: 0, Special hazard.</p> </div>	<p><b>HMIS III:</b></p> <table border="1" style="width: 100%;"> <tr> <td style="background-color: blue; color: white;"><b>HEALTH</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: red; color: white;"><b>FLAMMABILITY</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: yellow; color: black;"><b>PHYSICAL HAZARD</b></td> <td style="text-align: center;"><b>0</b></td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

**NFPA Flammable and Combustible Liquids Classification**

Combustible Liquid Class IIIB

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**Full text of H-Statements referred to under sections 2 and 3.**

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Sources of key data used to compile the Safety Data Sheet  
Ashland internal data including own and sponsored test reports  
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists  
BEI : Biological Exposure Index  
CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
FG : Food grade  
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
H-statement : Hazard Statement  
IATA : International Air Transport Association.  
IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization  
ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"  
IMDG : International Maritime Code for Dangerous Goods  
ISO : International Organization for Standardization  
logPow : octanol-water partition coefficient  
LCxx : Lethal Concentration, for xx percent of test population  
LDxx : Lethal Dose, for xx percent of test population.  
ICxx : Inhibitory Concentration for xx of a substance  
Ecxx : Effective Concentration of xx  
N.O.S.: Not Otherwise Specified  
OECD : Organization for Economic Co-operation and Development  
OEL : Occupational Exposure Limit  
P-Statement : Precautionary Statement  
PBT : Persistent , Bioaccumulative and Toxic  
PPE : Personal Protective Equipment  
STEL : Short-term exposure limit  
STOT : Specific Target Organ Toxicity

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TLV : Threshold Limit Value  
TWA : Time-weighted average  
vPvB : Very Persistent and Very Bioaccumulative  
WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act  
DOT : Department of Transportation  
FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act  
HMIRC : Hazardous Materials Information Review Commission  
HMIS : Hazardous Materials Identification System  
NFPA : National Fire Protection Association  
NIOSH : National Institute for Occupational Safety and Health  
OSHA : Occupational Safety and Health Administration  
PMRA : Health Canada Pest Management Regulatory Agency  
RTK : Right to Know  
WHMIS : Workplace Hazardous Materials Information System

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29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® PREMIUM PERFORMANCE AUTOMATIC TRANSMISSION FLUID

### Recommended use of the chemical and restrictions on use

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	Asp. Tox. 1; H304	11.82

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MINERAL OIL		Not a hazardous substance or mixture.	5.00
METHACRYLATE COPOLYMER		Eye Irrit. 2A; H319	1.66
ALKOXYLATED LONG-CHAIN ALKYL AMINE		Acute Tox. 4; H302 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 3; H402 Aquatic Chronic 3; H412	0.40

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#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipid pneumonia) that may progress to pulmonary

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fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
 stomach or intestinal upset (nausea, vomiting, diarrhea)  
 irritation (nose, throat, airways)

Notes to physician : No hazards which require special first aid measures.

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## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
 Water spray  
 Foam  
 Carbon dioxide (CO<sub>2</sub>)  
 Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
 Hydrocarbons
- Specific extinguishing methods :  
  
 Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

---

## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.

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Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.

Other information : Comply with all applicable federal, state, and local regulations.

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## SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.

Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid : No materials to be especially mentioned.

---

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	REL	5 mg/m3 Mist.	NIOSH/GUID E
		STEL	10 mg/m3 Mist.	NIOSH/GUID E
		PEL	5 mg/m3 Mist.	OSHA_TRANS
MINERAL OIL		REL	5 mg/m3 Mist.	NIOSH/GUID E
		STEL	10 mg/m3 Mist.	NIOSH/GUID E
		PEL	5 mg/m3 Mist.	OSHA_TRANS
		TWA	5 mg/m3 Mist.	TN OEL
		TWA	5 mg/m3 Inhalable fraction.	ACGIH

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

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### Personal protective equipment

- Respiratory protection : No personal respiratory protective equipment normally required.
- Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.
- Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).
- Hygiene measures : General industrial hygiene practice.

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : liquid
- Colour : red
- Odour : hydrocarbon-like
- Odour Threshold : No data available
- pH : No data available
- : No data available
- : No data available
- Flash point : > 390 °F / > 199 °C  
Method: Cleveland open cup
- Evaporation rate : > 1  
Ethyl Ether
- Flammability (solid, gas) : No data available
- Upper explosion limit : 6 %(V)  
GLP: Calculated Explosive Limit
- Lower explosion limit : 1 %(V)  
GLP: Calculated Explosive Limit
- Vapour pressure : 0.0133333 hPa (21.11 °C)  
Calculated Vapor Pressure



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Relative vapour density : No data available

Relative density : 7.29 (15.6 °C)

Density : 0.862 g/cm<sup>3</sup> (15.56 °C)

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : ca. 43 mm<sup>2</sup>/s (40 °C)

Oxidizing properties : No data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Conditions to avoid : excessive heat

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
Hydrocarbons

---

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact

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Ingestion

**Acute toxicity**

Not classified based on available information.

**Components:**

ALKOXYLATED LONG-CHAIN ALKYL AMINE:

Acute oral toxicity

Assessment: The component/mixture is classified as acute oral toxicity, category 4.

**Skin corrosion/irritation**

Not classified based on available information.

**Product:**

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

MINERAL OIL:

Result: Mildly irritating to skin

METHACRYLATE COPOLYMER:

Result: Not irritating to skin

ALKOXYLATED LONG-CHAIN ALKYL AMINE:

Result: Corrosive to skin

**Serious eye damage/eye irritation**

Not classified based on available information.

**Product:**

Remarks: Unlikely to cause eye irritation or injury.

**Components:**

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to eyes

MINERAL OIL:

Result: Mildly irritating to eyes

METHACRYLATE COPOLYMER:

Result: Irritating to eyes

ALKOXYLATED LONG-CHAIN ALKYL AMINE:

Result: Corrosive to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

**Product:**

Assessment: Does not cause skin sensitisation.

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**Components:**

ALKOXYLATED LONG-CHAIN ALKYL AMINE:

Assessment: May cause sensitization by skin contact.

**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Components:**

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

ALKOXYLATED LONG-CHAIN ALKYL AMINE:

Ecotoxicology Assessment

Acute aquatic toxicity : Harmful to aquatic life.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

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**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

**U.S. DOT - ROAD**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TRANSPORT CANADA - ROAD**

Not dangerous goods

**TRANSPORT CANADA - RAIL**

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Not dangerous goods
---------------------

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods
---------------------

**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods
---------------------

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods
---------------------

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods
---------------------

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods
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\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
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Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313 Component(s)** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Pennsylvania Right To Know**

HEAVY PARAFFINIC DISTILLATE	64742-54-7	90.00 - 100.00 %
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	10.00 - 20.00 %
MINERAL OIL	Not Assigned	5.00 - 10.00 %

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AUTOMATIC TRANSMISSION FLUID ADDITIVE	Not Assigned	1.00 - 5.00 %
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**New Jersey Right To Know**

HEAVY PARAFFINIC DISTILLATE	64742-54-7	90.00 - 100.00 %
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	10.00 - 20.00 %
MINERAL OIL	Not Assigned	5.00 - 10.00 %
AUTOMATIC TRANSMISSION FLUID ADDITIVE	Not Assigned	1.00 - 5.00 %
METHACRYLATE COPOLYMER	Not Assigned	1.00 - 5.00 %

**California Prop 65**

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL.

AUSTR : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

KECL : On the inventory, or in compliance with the inventory

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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**SECTION 16. OTHER INFORMATION**

**Further information**

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<b>NFPA:</b>	<b>HMIS III:</b>						
<p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>1</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>PHYSICAL HAZARD</b></td> <td><b>0</b></td> </tr> </table> <p>0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

**NFPA Flammable and Combustible Liquids Classification**

Combustible Liquid Class IIIB

**Full text of H-Statements referred to under sections 2 and 3.**

- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H402 Harmful to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

Sources of key data used to compile the Safety Data Sheet

Ashland internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

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BEI : Biological Exposure Index  
 CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
 CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
 FG : Food grade  
 GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
 H-statement : Hazard Statement  
 IATA : International Air Transport Association.  
 IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization  
 ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"  
 IMDG : International Maritime Code for Dangerous Goods  
 ISO : International Organization for Standardization  
 logPow : octanol-water partition coefficient  
 LCxx : Lethal Concentration, for xx percent of test population  
 LDxx : Lethal Dose, for xx percent of test population.  
 ICxx : Inhibitory Concentration for xx of a substance  
 Ecxx : Effective Concentration of xx  
 N.O.S.: Not Otherwise Specified  
 OECD : Organization for Economic Co-operation and Development  
 OEL : Occupational Exposure Limit  
 P-Statement : Precautionary Statement  
 PBT : Persistent , Bioaccumulative and Toxic  
 PPE : Personal Protective Equipment  
 STEL : Short-term exposure limit  
 STOT : Specific Target Organ Toxicity  
 TLV : Threshold Limit Value  
 TWA : Time-weighted average  
 vPvB : Very Persistent and Very Bioaccumulative  
 WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act  
 DOT : Department of Transportation  
 FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act  
 HMIRC : Hazardous Materials Information Review Commission  
 HMIS : Hazardous Materials Identification System  
 NFPA : National Fire Protection Association  
 NIOSH : National Institute for Occupational Safety and Health  
 OSHA : Occupational Safety and Health Administration  
 PMRA : Health Canada Pest Management Regulatory Agency  
 RTK : Right to Know  
 WHMIS : Workplace Hazardous Materials Information System



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NAPA® PREMIUM CONVENTIONAL SAE 10W-30 MOTOR OIL		Version: 1.0
NP75130		

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® PREMIUM CONVENTIONAL SAE 10W-30  
MOTOR OIL

### Recommended use of the chemical and restrictions on use

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	Eye Irrit. 2A; H319	6.22

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HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	Asp. Tox. 1; H304	2.52
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#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.
- Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)
- Notes to physician : No hazards which require special first aid measures.

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#### SECTION 5. FIREFIGHTING MEASURES

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- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO2)  
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons
- Specific extinguishing methods : Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

---

## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

---

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : No materials to be especially mentioned.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	REL	5 mg/m3 Mist.	NIOSH/GUID E
		STEL	10 mg/m3 Mist.	NIOSH/GUID E
		PEL	5 mg/m3 Mist.	OSHA_TRANS

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

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Boiling point/boiling range : No data available

Flash point : > 390 °F / > 199 °C  
Method: Cleveland open cup

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : 0.0133333 hPa (21.11 °C)  
Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : No data available

Density : 0.8686 g/cm<sup>3</sup> (15.56 °C)

Solubility(ies)

    Water solubility : No data available

    Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition :  
No data available

Viscosity

    Viscosity, dynamic : No data available

    Viscosity, kinematic : 70 mm<sup>2</sup>/s (40 °C)

Oxidizing properties : No data available

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

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Conditions to avoid : excessive heat

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
Hydrocarbons

---

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

### **Acute toxicity**

Not classified based on available information.

### **Skin corrosion/irritation**

Not classified based on available information.

### **Product:**

Result: Repeated exposure may cause skin dryness or cracking.

### **Components:**

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Not irritating to skin

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

### **Serious eye damage/eye irritation**

Not classified based on available information.

### **Product:**

Remarks: Unlikely to cause eye irritation or injury.

### **Components:**

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Irritating to eyes

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to eyes

### **Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

### **Germ cell mutagenicity**

Not classified based on available information.

### **Carcinogenicity**

Not classified based on available information.

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**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Components:**

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

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**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

---

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

**U.S. DOT - ROAD**

Not dangerous goods

**U.S. DOT - RAIL**

Not dangerous goods

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods

**TRANSPORT CANADA - ROAD**

Not dangerous goods

**TRANSPORT CANADA - RAIL**

Not dangerous goods

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods

**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods



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**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
------------------	----

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313 Component(s)SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Pennsylvania Right To Know**

HEAVY PARAFFINIC DISTILLATE	64742-54-7	90.00 - 100.00 %
Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	5.00 - 10.00 %
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	1.00 - 5.00 %

**New Jersey Right To Know**

HEAVY PARAFFINIC DISTILLATE	64742-54-7	90.00 - 100.00 %
Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	5.00 - 10.00 %
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	1.00 - 5.00 %
POLYOLEFIN AMIDE ALKENEAMINE	Not Assigned	1.00 - 5.00 %
LUBRICANT ADDITIVE	Not Assigned	1.00 - 5.00 %

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**California Prop 65** Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL.
- AUSTR : On the inventory, or in compliance with the inventory
- ENCS : Contact your sales representative for additional information.
- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : q (quantity restricted)

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**SECTION 16. OTHER INFORMATION**

**Further information**

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<p><b>NFPA:</b></p> <div style="text-align: center;"> <p>Flammability</p> <p>Health: 1, Flammability: 1, Instability: 0</p> <p>Special hazard.</p> </div>	<p><b>HMIS III:</b></p> <table border="1" style="width: 100%;"> <tr> <td style="background-color: blue; color: white; text-align: center;"><b>HEALTH</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: red; color: white; text-align: center;"><b>FLAMMABILITY</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: yellow; text-align: center;"><b>PHYSICAL HAZARD</b></td> <td style="text-align: center;"><b>0</b></td> </tr> </table> <p>0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

**NFPA Flammable and Combustible Liquids Classification**  
Combustible Liquid Class IIIB

**Full text of H-Statements referred to under sections 2 and 3.**

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H304

May be fatal if swallowed and enters airways.

Sources of key data used to compile the Safety Data Sheet

Ashland internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

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HMIS : Hazardous Materials Identification System  
 NFPA : National Fire Protection Association  
 NIOSH : National Institute for Occupational Safety and Health  
 OSHA : Occupational Safety and Health Administration  
 PMRA : Health Canada Pest Management Regulatory Agency  
 RTK : Right to Know  
 WHMIS : Workplace Hazardous Materials Information System

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29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : NAPA® PREMIUM CONVENTIONAL SAE 10W-40  
MOTOR OIL

### Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : MOTOR OIL

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### GHS Label element

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Defatter

### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	Eye Irrit. 2A; H319	6.23

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HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	Asp. Tox. 1; H304	3.70

#### SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.
- In case of eye contact : Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.
- Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)
- Notes to physician : No hazards which require special first aid measures.

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## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO2)  
Dry chemical
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons  
Aldehydes
- Specific extinguishing methods :
- Product is compatible with standard fire-fighting agents.
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

---

## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

---

## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.
- Conditions for safe storage : Electrical installations / working materials must comply with the technological safety standards.

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Materials to avoid : No materials to be especially mentioned.

---

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	REL	5 mg/m3 Mist.	NIOSH/GUID E
		STEL	10 mg/m3 Mist.	NIOSH/GUID E
		PEL	5 mg/m3 Mist.	OSHA_TRA NS

**Engineering measures** : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally required.

Eye protection : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes.

Skin and body protection : Wear as appropriate:  
Safety shoes  
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : General industrial hygiene practice.

---

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Colour : amber

Odour : hydrocarbon-like



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Odour Threshold : No data available  
 pH : No data available  
 Melting point/freezing point : No data available  
 Boiling point/boiling range : 570.00 °F / 298.89 °C  
 (1013.33 hPa)  
 Flash point : > 390 °F / > 199 °C  
 Method: Cleveland open cup  
 Evaporation rate : 1  
 Ethyl Ether  
 Flammability (solid, gas) : No data available  
 Upper explosion limit : No data available  
 Lower explosion limit : No data available  
 Vapour pressure : No data available  
 Relative vapour density : No data available  
 Relative density : No data available  
 Density : 0.8690 g/cm<sup>3</sup> (15.56 °C)  
 Solubility(ies)  
     Water solubility : No data available  
     Solubility in other solvents : No data available  
 Partition coefficient: n-  
 octanol/water : No data available  
 Thermal decomposition : No data available  
 Viscosity  
     Viscosity, dynamic : No data available  
     Viscosity, kinematic : 104 mm<sup>2</sup>/s (40 °C)  
 Oxidizing properties : No data available

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

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Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Conditions to avoid : excessive heat

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
Hydrocarbons

---

## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
Skin contact  
Eye Contact  
Ingestion

### **Acute toxicity**

Not classified based on available information.

### **Skin corrosion/irritation**

Not classified based on available information.

### **Product:**

Result: Repeated exposure may cause skin dryness or cracking.

### **Components:**

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Not irritating to skin

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

### **Serious eye damage/eye irritation**

Not classified based on available information.

### **Product:**

Remarks: Unlikely to cause eye irritation or injury.

### **Components:**

Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts:

Result: Irritating to eyes

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

Result: Mildly irritating to eyes

### **Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

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**Germ cell mutagenicity**

Not classified based on available information.

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Product:**

No aspiration toxicity classification

**Components:**

HYDROTREATED LIGHT PARAFFINIC DISTILLATE:

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available

**Carcinogenicity:**

**IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

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**Other adverse effects**

No data available

**Product:**

Additional ecological information : No data available

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

**U.S. DOT - ROAD**

Not dangerous goods
---------------------

**U.S. DOT - RAIL**

Not dangerous goods
---------------------

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods
---------------------

**TRANSPORT CANADA - ROAD**

Not dangerous goods
---------------------

**TRANSPORT CANADA - RAIL**

Not dangerous goods
---------------------

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods
---------------------

**INTERNATIONAL MARITIME DANGEROUS GOODS**

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Not dangerous goods
---------------------

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods
---------------------

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods
---------------------

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

Not dangerous goods
---------------------

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
------------------	----

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**SECTION 15. REGULATORY INFORMATION**

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 313 Component(s)** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**Pennsylvania Right To Know**

HEAVY PARAFFINIC DISTILLATE	64742-54-7	90.00 - 100.00 %
Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	5.00 - 10.00 %
HYDROTREATED LIGHT PARAFFINIC DISTILLATE	64742-55-8	1.00 - 5.00 %

**New Jersey Right To Know**

HEAVY PARAFFINIC DISTILLATE	64742-54-7	90.00 - 100.00 %
Benzenesulfonic acid, C10-60-alkyl derivs., sodium salts	90194-32-4	5.00 - 10.00 %
HYDROTREATED LIGHT PARAFFINIC	64742-55-8	1.00 - 5.00 %

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DISTILLATE

POLYOLEFIN AMIDE ALKENEAMINE                      Not Assigned                      1.00 - 5.00 %

LUBRICANT ADDITIVE    Not Assigned                      1.00 - 5.00 %

**California Prop 65**                      Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

- TSCA                      : On TSCA Inventory
- DSL                      : All components of this product are on the Canadian DSL.
- AUSTR                      : On the inventory, or in compliance with the inventory
- ENCS                      : q (quantity restricted)
- KECL                      : On the inventory, or in compliance with the inventory
- PICCS                      : On the inventory, or in compliance with the inventory
- IECSC                      : q (quantity restricted)

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**SECTION 16. OTHER INFORMATION**

**Further information**

Revision Date: 05/22/2015

<p><b>NFPA:</b></p> <div style="text-align: center;"> <p>Flammability</p> <p>Health                      Instability</p> <p>Special hazard.</p> </div>	<p><b>HMIS III:</b></p> <table border="1" style="width: 100%;"> <tr> <td style="background-color: blue; color: white;"><b>HEALTH</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: red; color: white;"><b>FLAMMABILITY</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td style="background-color: yellow;"><b>PHYSICAL HAZARD</b></td> <td style="text-align: center;"><b>0</b></td> </tr> </table> <p>0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>1</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	<b>0</b>
<b>HEALTH</b>	<b>1</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>	<b>0</b>						

**NFPA Flammable and Combustible Liquids Classification**

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Combustible Liquid Class IIIB

**Full text of H-Statements referred to under sections 2 and 3.**

H304                      May be fatal if swallowed and enters airways.  
H319                      Causes serious eye irritation.

Sources of key data used to compile the Safety Data Sheet  
Ashland internal data including own and sponsored test reports  
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists  
BEI : Biological Exposure Index  
CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
FG : Food grade  
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
H-statement : Hazard Statement  
IATA : International Air Transport Association.  
IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization  
ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"  
IMDG : International Maritime Code for Dangerous Goods  
ISO : International Organization for Standardization  
logPow : octanol-water partition coefficient  
LCxx : Lethal Concentration, for xx percent of test population  
LDxx : Lethal Dose, for xx percent of test population.  
ICxx : Inhibitory Concentration for xx of a substance  
Ecxx : Effective Concentration of xx  
N.O.S.: Not Otherwise Specified  
OECD : Organization for Economic Co-operation and Development  
OEL : Occupational Exposure Limit  
P-Statement : Precautionary Statement  
PBT : Persistent , Bioaccumulative and Toxic  
PPE : Personal Protective Equipment  
STEL : Short-term exposure limit  
STOT : Specific Target Organ Toxicity  
TLV : Threshold Limit Value  
TWA : Time-weighted average  
vPvB : Very Persistent and Very Bioaccumulative

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WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System





# SAFETY DATA SHEET

No. 100/105/107/110/115

## Section 1. Identification

**GHS product identifier** : No. 100/105/107/110/115  
**Other means of identification** : Not available.  
**Product type** : Solid.

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** : Petroleum lubricating grease  
**Area of application** : Industrial applications.

**Supplier/Manufacturer** : LUBRIPLATE® Lubricants Co.  
129 Lockwood St.  
Newark, NJ 07105  
Telephone no.: 1-973-589-9150

**e-mail address of person responsible for this SDS** : SDS@lubriplate.com

**Emergency telephone number (with hours of operation)** : CHEM-TEL 1-800-255-3924 (24 hour)

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : SKIN SENSITIZATION - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 28.1%

### GHS label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : May cause an allergic skin reaction.

### Precautionary statements

**Prevention** : Wear protective gloves. Avoid breathing dust. Contaminated work clothing should not be allowed out of the workplace.

**Response** : IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention.

**Storage** : Not applicable.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified** : Defatting to the skin.

**Date of issue/Date of revision**

: 01/22/2015

**Date of previous issue**

: No previous validation

**Version** : 1

1/12

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : Not applicable.  
**Product code** : Not available.

Ingredient name	Other names	%	CAS number
Distillates (petroleum), hydrotreated heavy naphthenic	Distillates (petroleum), hydrotreated heavy naphthenic	60-100	64742-52-5
zinc oxide	zinc oxide	5-10	1314-13-2
zinc bis(dibutyldithiocarbamate)	zinc bis(dibutyldithiocarbamate)	0.1-1	136-23-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section.**

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : May cause an allergic skin reaction.  
**Ingestion** : No known significant effects or critical hazards.

## Section 4. First aid measures

### Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : Do not use water jet.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
metal oxide/oxides  
sulfur oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## Section 6. Accidental release measures

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), hydrotreated heavy naphthenic	<p><b>ACGIH TLV (United States, 4/2014).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction</p> <p><b>NIOSH REL (United States, 10/2013).</b> TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Mist STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Mist</p> <p><b>OSHA PEL (United States, 2/2013).</b> TWA: 5 mg/m<sup>3</sup> 8 hours.</p>
zinc oxide	<p><b>NIOSH REL (United States, 10/2013).</b> CEIL: 15 mg/m<sup>3</sup> Form: Dust TWA: 5 mg/m<sup>3</sup> 10 hours. Form: Dust and fumes STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Fume</p> <p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Fume STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Fume</p>

## Section 8. Exposure controls/personal protection

TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction  
 TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust  
**OSHA PEL (United States, 2/2013).**  
 TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Fume  
 TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction  
 TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust  
**ACGIH TLV (United States, 4/2014).**  
 TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction  
 STEL: 10 mg/m<sup>3</sup> 15 minutes. Form: Respirable fraction

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	: Solid. [grease]
<b>Color</b>	: Off-white.
<b>Odor</b>	: Mineral oil.
<b>Odor threshold</b>	: Not available.
<b>pH</b>	: Not available.
<b>Melting point</b>	: Not available.
<b>Boiling point</b>	: >288°C (>550.4°F)
<b>Flash point</b>	: Open cup: 182°C (359.6°F) [Cleveland.]
<b>Evaporation rate</b>	: <0.01 (butyl acetate = 1)
<b>Flammability (solid, gas)</b>	: Not available.
<b>Lower and upper explosive (flammable) limits</b>	: Lower: 0.9% Upper: 7%
<b>Vapor pressure</b>	: Not available.
<b>Vapor density</b>	: Not available.
<b>Relative density</b>	: 0.89 to 0.93 [Water = 1]
<b>Solubility</b>	: Insoluble in the following materials: cold water and hot water.
<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>SADT</b>	: Not available.
<b>Viscosity</b>	: Kinematic (40°C (104°F)): 0.58 cm <sup>2</sup> /s (58 cSt)

## Section 10. Stability and reactivity

<b>Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.  Under normal conditions of storage and use, hazardous polymerization will not occur.
<b>Conditions to avoid</b>	: Keep away from heat, sparks and flame. Keep away from all sources of ignition.
<b>Incompatible materials</b>	: Reactive or incompatible with the following materials: oxidizing materials. Chlorine
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated heavy naphthenic zinc bis (dibutyldithiocarbamate)	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Distillates (petroleum), hydrotreated heavy naphthenic zinc oxide	Skin - Severe irritant	Rabbit	-	500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
zinc bis (dibutyldithiocarbamate)	Eyes - Mild irritant	Rabbit	-	39 milligrams	-
	Skin - Mild irritant	Rabbit	-	0.5 Grams	-

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

**Conclusion/Summary** : The mineral oils in the product contain < 3% DMSO extract (IP 346).

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
zinc bis(dibutyldithiocarbamate)	Category 3	Not applicable.	Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Name	Result
Distillates (petroleum), hydrotreated heavy naphthenic	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.

## Section 11. Toxicological information

- Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : May cause an allergic skin reaction.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No specific data.  
**Inhalation** : No specific data.  
**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
**Ingestion** : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

- General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : No known significant effects or critical hazards.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
zinc oxide	Acute EC50 0.042 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 98 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.1 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.017 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours

**Date of issue/Date of revision** : 01/22/2015 **Date of previous issue** : No previous validation **Version** : 1 8/12



## Section 12. Ecological information

zinc bis (dibutyldithiocarbamate)	Acute EC50 0.74 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 520 mg/l	Fish - Oncorhynchus mykiss	96 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
zinc oxide	-	60960	high

### Mobility in soil

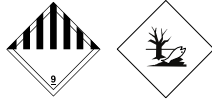
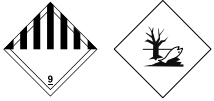
Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	UN3077	UN3077
UN proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (zinc oxide). Marine pollutant (zinc oxide)	Environmentally hazardous substance, solid, n.o.s. (zinc oxide)
Transport hazard class(es)	-	9 	9 
Packing group	-	III	III
Environmental hazards	No.	Yes.	Yes.

## Section 14. Transport information

<b>Additional information</b>	-	<p>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</p> <p><b>Emergency schedules (EmS)</b> F-A, S-F</p> <p><b>Special provisions</b> 274, 335, 966, 967</p>	<p>The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.</p> <p><b>Passenger and Cargo Aircraft</b> Quantity limitation: 400 kg Packaging instructions: 956</p> <p><b>Cargo Aircraft Only</b>Quantity limitation: 400 kg Packaging instructions: 956</p> <p><b>Limited Quantities - Passenger Aircraft</b>Quantity limitation: 30 kg Packaging instructions: Y956</p> <p><b>Special provisions</b> A97, A158, A179</p>
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**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 307:** zinc oxide; zinc bis(dibutyl)dithiocarbamate)  
**Clean Water Act (CWA) 311:** sodium hydroxide

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Immediate (acute) health hazard

#### Composition/information on ingredients

## Section 15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), hydrotreated heavy naphthenic	60-100	No.	No.	No.	Yes.	No.
zinc oxide	5-10	No.	No.	No.	Yes.	No.
zinc bis(dibutyldithiocarbamate)	0.1-1	Yes.	No.	No.	Yes.	No.

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	zinc oxide	1314-13-2	5-10
<b>Supplier notification</b>	zinc oxide	1314-13-2	5-10

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- Massachusetts** : The following components are listed: ZINC OXIDE FUME
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: MINERAL OIL (HIGHLY REFINED); OIL MIST, MINERAL; ZINC OXIDE
- Pennsylvania** : The following components are listed: ZINC OXIDE (ZNO)

### California Prop. 65

**WARNING:** This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
crystalline silica non-respirable	Yes.	No.	No.	No.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health	*	1
Flammability		1
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)



## Section 16. Other information

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

**Date of issue/Date of revision** : 01/22/2015

**Date of previous issue** : No previous validation

**Version** : 1

**Prepared by** : IHS

**Key to abbreviations** :

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

**References** : HCS (U.S.A.)- Hazard Communication Standard  
International transport regulations

☑ Indicates information that has changed from previously issued version.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

# SAFETY DATA SHEET

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## 1. IDENTIFICATION

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### 1.1. PRODUCT IDENTIFIER USED ON LABEL:

1.2. Mercury Premium Plus 2-Cycle Engine Oil, TC-W3

1.3. OTHER MEANS OF IDENTIFICATION: 090-1413K

1.3.1. Mercury Premium Plus 2-Cycle Engine Oil, TC-W3

1.3.2.

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### 1.4. RECOMMENDED USE OF THE CHEMICAL AND RESTRICTIONS ON USE;

1.4.1. PETROLEUM LUBRICATING OIL

1.4.2. NO OTHER USES RECOMMENDED

### 1.5. NAME, ADDRESS, AND TELEPHONE NUMBER OF THE CHEMICAL MANUFACTURER, IMPORTER, OR OTHER RESPONSIBLE PARTY:

1.5.1.

#### **Mercury Marine**

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P.O. Box 1939

Fond du Lac, WI 54935

United States of America

#### **Product Information**

General Information: +1 (920) 929-5000

### 1.6. EMERGENCY PHONE NUMBER:

1.6.1.

#### **Emergency Response**

North America: CHEMTREC (800) 424-9300 after 5:00pm CST Or +1703 5273887

#### **Health Emergency**

USA: (800) 264-6457 or +17316454972

# SAFETY DATA SHEET

## 2. HAZARD(S) IDENTIFICATION

### 2.1. CLASSIFICATION OF THE CHEMICAL IN ACCORDANCE WITH PARAGRAPH (d) of §1910.1200;

#### 2.1.1.



**R36/38** IRRITATING TO EYES AND SKIN  
**R43** May cause sensitisation by skin contact  
**R52/53** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment  
**R65** Harmful: may cause lung damage if swallowed

### 2.2. Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200

- 2.2.1. Inhalation: Inhalation of fumes may result in dizziness, headache and respiratory irritation.  
2.2.2. Eye Contact: Contact with eyes may cause minimal irritation.  
2.2.3. Skin Contact: Mild irritation may occur with prolonged or repeated contact.  
2.2.4. Ingestion: Slightly toxic. Pulmonary aspiration hazard if vomiting occurs.

### 2.3. Hazards not otherwise classified that have been identified during the classification process;

- 2.3.1. TLV: 5mg/m<sup>3</sup> as mist. ACGIH 1984-85.  
2.3.2. Chronic Effects: Ingredients of this product may be listed as potential carcinogens in N.T.P. Annual Report on Carcinogens, I.A.R.C. Monographs, or by O.S.H.A. HCS (g) (2) (vii).

## 3. Composition/ information on ingredients

### 3.1. The chemical name and concentration (exact percentage) or concentration ranges of all ingredients which are classified as health hazards in accordance with paragraph (d) of §1910.1200

#### 3.1.1.

COMPONENTS	CAS Number	EU Number	Concentration (%)	R - Phrase
Long chain alkyl polyamide	Polymer	Polymer	0.05-0.10	Xi/R36/38, Xi/R43, R52/53
Highly refined mineral oil (C15 – C50)	***	***	40-70	None
Polyolefin polyamine succinimide, Molybdenum complex	Polymer	Polymer	0.005-0.011	R53
Polyolefin polyamine succinimide	Polymer	Polymer	0.005-0.011	R53
Distillates (petroleum), hydrotreated light	64742-47-8	265-149-8	18-25	R65

# SAFETY DATA SHEET

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Polyisobutylene	9003-27-4	Not available	30-42	**
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- \*\*\*Contains one or more of the following EINECS numbers: 265-090-8, 265-091-3, 265-096-0, 265-097-6, 265-098-1, 265-101-6, 265-155-0, 265-156-6, 265-157-1, 265-158-7, 265-159-2, 265-160-8, 265-161-3, 265-166-0, 265-169-7, 265-176-5, 276-735-8, 276-736-3, 276-737-9, 276-738-4, 278-012-2.
- \* The classification as a carcinogen need not apply the substance contains less than 3 %DMSO extract as measured by IP 346
- \*\* This substance is not listed in a priority list (as foreseen under Council Regulation (EEC) No 793/93 on the evaluation and control of the risks of existing substances.).

## 4. FIRST AID MEASURES

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### 4.1.

<b>Skin:</b>	Wash skin with soap and warm water. Wash clothing before re-use.
<b>Eye:</b>	If splashed into eyes flush eyes with clear water for five (5) minutes.
<b>Inhalation:</b>	If overcome by fumes remove from exposure immediately.
<b>Ingestion:</b>	If ingested, do not induce vomiting. Call a physician.

## 5. FIRE FIGHTING MEASURES

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### 5.1. PROTECTION OF FIRE FIGHTERS:

#### 5.1.1. Fire Fighting Instructions:

5.1.2. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self contained breathing apparatus.

### 5.2. Extinguishing Media:

5.2.1. Use water fog, foam, dry chemical or carbon dioxide (CO<sub>2</sub>) to extinguish flames.

### 5.3. Special Firefighting Procedures:

5.3.1. Cool exposed containers with water spray.

### 5.4. Unusual Fire and Explosion Hazards:

5.4.1. Pressure increase in over heated closed containers. Cool containers with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

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### 6.1. Spill Procedures:

# SAFETY DATA SHEET

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6.1.1. Remove ignition sources. Recover Liquid. Add absorbent to spill area. Ventilate confined spaces. Advise authorities if product enters sewers, etc.

## 6.2. Waste Disposal:

6.2.1. Assure conformity with applicable disposal regulations. Dispose of absorbed material at approved waste site

## 6.3. Precautionary Measures:

6.3.1. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Wash thoroughly after handling.

6.3.2. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

## 7. HANDLING AND STORAGE

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### 7.1. HANDLING

7.1.1. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

### 7.2. STORAGE

7.2.1. Keep container closed when not in use. Do not store with strong oxidizing agents. Do not store at elevated temperatures.

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

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### 8.1. EXPOSURE LIMIT:

8.1.1. OSHA – 5mg/m<sup>3</sup> mist

### 8.2. Ventilation Procedure:

8.2.1. Ventilate as needed to comply with exposure limit

### 8.3. Eye Protection:

8.3.1. Use goggles/face shield to avoid eye contact

### 8.4. Work/Hygienic Practices:

8.4.1. If clothing becomes contaminated, change to fresh clean clothing. Do not wear until thoroughly laundered

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1.



# SAFETY DATA SHEET

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9.1.1. Vapor Pressure (mmHg) at 20°C:	<1
9.1.2. Specific Gravity at 60°F (15.6°C):	0.87
9.1.3. Water Solubility:	Negligible
9.1.4. Boiling Point:	Not available
9.1.5. Vapor Density (Air=1):	>1
9.1.6. Evaporation Rate (BUAC=1):	<1
9.1.7. Odor:	Mild Petroleum Odor
9.1.8. Appearance:	Green Colored Liquid
9.1.9. Viscosity at (ASTM D287):	159 SUS @ 100°F(37.8°C) (typical)
9.1.10. Viscosity at 100°C	6.5 cSt
9.1.11. Viscosity at 40°C	36 cSt
9.1.12. V.O.C.	200-250 g/L
9.1.13. Flash Point:	165.2°F / 74°C
9.1.14. Physical State	Liquid

## 10. STABILITY AND REACTIVITY

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- 10.1. **Stability:**
  - 10.1.1. Stable
- 10.2. **Incompatibility:**
  - 10.2.1. Avoid strong oxidants
- 10.3. **Polymerization:**
  - 10.3.1. Will not occur
- 10.4. **Thermal Decomposition:**
  - 10.4.1. Partial burning produces fumes, smoke and carbon monoxide

## 11. TOXICOLOGY INFORMATION

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- 11.1. **Distillates (petroleum), hydrotreated light**
  - 11.1.1. ORAL (LD50): Acute: >5000 mg/kg [Rat].
  - 11.1.2. DERMAL (LD50): Acute: >2000 mg/kg [Rabbit].





# SAFETY DATA SHEET

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HMIS		NFPA	
HEALTH HAZARD	1	HEALTH HAZARD	1
FIRE HAZARD	2	FIRE HAZARD	2
PHYSICAL HAZARD	0	INSTABILITY/REACTIVITY	0
PERSONAL PROTECTION	C		



16.2. **Date of preparation:** 09/24/2013

16.3. **MANUFACTURER DISCLAIMER:**

16.3.1. *The data presented herein is based upon tests and information, which we believe to be reliable. However, users should make their own investigations to determine the suitability of the information for their particular purpose*



Product name and identification details

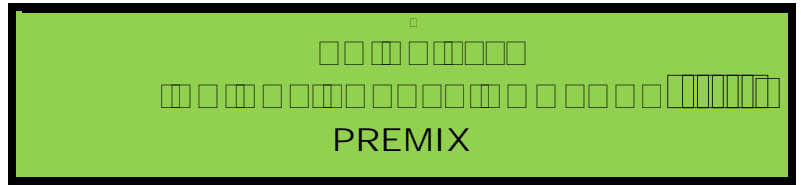
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# SAFETY DATA SHEET

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## 1. Identifikatsiya un klasifikatsiya

<p>1.1. Produkta nosaukums: <b>Pride</b></p> <p>1.2. Produkta kompozīcija: <b>Premix</b></p> <p>1.3. Produkta veids: <b>Premix</b></p> <p>1.4. Produkta veids: <b>Premix</b></p> <p>1.5. Produkta veids: <b>Premix</b></p> <p>1.6. Produkta veids: <b>Premix</b></p> <p>1.7. Produkta veids: <b>Premix</b></p> <p>1.8. Produkta veids: <b>Premix</b></p> <p>1.9. Produkta veids: <b>Premix</b></p> <p>1.10. Produkta veids: <b>Premix</b></p>	<p>1.1. Produkta nosaukums: <b>Pride</b></p> <p>1.2. Produkta kompozīcija: <b>Premix</b></p> <p>1.3. Produkta veids: <b>Premix</b></p> <p>1.4. Produkta veids: <b>Premix</b></p> <p>1.5. Produkta veids: <b>Premix</b></p> <p>1.6. Produkta veids: <b>Premix</b></p> <p>1.7. Produkta veids: <b>Premix</b></p> <p>1.8. Produkta veids: <b>Premix</b></p> <p>1.9. Produkta veids: <b>Premix</b></p> <p>1.10. Produkta veids: <b>Premix</b></p>
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## 2. Bīstamības novērtējums

<p>2.1. Bīstamības novērtējums: <b>H302</b></p> <p>2.2. Bīstamības novērtējums: <b>H312</b></p> <p>2.3. Bīstamības novērtējums: <b>H332</b></p> <p>2.4. Bīstamības novērtējums: <b>H302</b></p> <p>2.5. Bīstamības novērtējums: <b>H312</b></p> <p>2.6. Bīstamības novērtējums: <b>H332</b></p>	<p>2.1. Bīstamības novērtējums: <b>H302</b></p> <p>2.2. Bīstamības novērtējums: <b>H312</b></p> <p>2.3. Bīstamības novērtējums: <b>H332</b></p> <p>2.4. Bīstamības novērtējums: <b>H302</b></p> <p>2.5. Bīstamības novērtējums: <b>H312</b></p> <p>2.6. Bīstamības novērtējums: <b>H332</b></p>	<p>2.1. Bīstamības novērtējums: <b>H302</b></p> <p>2.2. Bīstamības novērtējums: <b>H312</b></p> <p>2.3. Bīstamības novērtējums: <b>H332</b></p> <p>2.4. Bīstamības novērtējums: <b>H302</b></p> <p>2.5. Bīstamības novērtējums: <b>H312</b></p> <p>2.6. Bīstamības novērtējums: <b>H332</b></p>	<p>2.1. Bīstamības novērtējums: <b>H302</b></p> <p>2.2. Bīstamības novērtējums: <b>H312</b></p> <p>2.3. Bīstamības novērtējums: <b>H332</b></p> <p>2.4. Bīstamības novērtējums: <b>H302</b></p> <p>2.5. Bīstamības novērtējums: <b>H312</b></p> <p>2.6. Bīstamības novērtējums: <b>H332</b></p>
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## 3. Sastāvdaļas

Produkta nosaukums	Produkta kompozīcija	Produkta veids	Produkta veids
Pride	Premix	Premix	Premix
Pride	Premix	Premix	Premix
Pride	Premix	Premix	Premix
Pride	Premix	Premix	Premix











# SAFETY DATA SHEET

Product Name:	PPE	Transport Symbol
Pro Honda GN4 MC Oil SAE 10W-40 SJ, 12 x 1 Quart Case		Not regulated

Revision Date: 31-Mar-2015

Revision Number: 2

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### 1.1 Product Identifier

**Product Name:** Pro Honda GN4 MC Oil SAE 10W-40 SJ, 12 x 1 Quart Case

### Other means of identification

**Product Code:** 2208-042

**Synonyms** Not available

### 1.2 Recommended use of the chemical and restrictions on use

**Recommended Use** 4 Stroke Motorcycle Engine Oil

**Uses advised against** No information available

### 1.3. Details of the supplier of the safety data sheet

**Manufactured by** Idemitsu Lubricants America Corporation  
701 Port Rd.  
Jeffersonville, IN. 47130  
Telephone: 812-285-8234  
Fax: 812-285-8243  
Contact Name: Robin Hutchens  
Email: sds@ilacorp.com

**24 Hour Emergency Phone Number** Within USA and Canada: 1-800-424-9300  
Outside USA and Canada: + 1 703-741-5970 (collect calls accepted)

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification

This material is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and WHMIS 2015

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Not classified
Skin corrosion/irritation	Not classified
Serious eye damage/eye irritation	Not classified
Respiratory sensitization	Not classified
Skin sensitization	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
Aspiration toxicity	Not classified
GHS Physical Hazard Category Number	None

### 2.2. Label elements

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

**Hazards not otherwise classified (HNOC)**

Not applicable

### 2.3 Other information

**Other hazards**

- Harmful to aquatic life
- Avoid release to the environment

**Unknown acute toxicity**

3.902% of the mixture consists of ingredient(s) of unknown toxicity

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Not applicable

### 3.2 Mixtures

#### Hazardous Components

Chemical Name	CAS-No	Weight %	Notes
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based	72623-87-1	60-70	L
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	10-20	L
White mineral oil	8042-47-5	1-5	
Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4	1-5	L

Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	1-5	L
Calcium long chain alkyl phenate sulphide	68784-26-9	<1	
Phenol, (tetrapropenyl) derivatives	74499-35-7	<1	
distillates (petroleum), hydrotreated light	64742-47-8	<0.1	
Petroleum distillates, solvent dewaxed light paraffinic	64742-56-9	<0.1	L
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	<0.1	L
Phenol,(tetrapropenyl) derivs.,calcium salts	132752-19-3	<0.1	
Phenol, (tetrapropenyl) derivs.	74499-35-7	<0.1	
Ethylene glycol	107-21-1	<0.1	

**Non-Hazardous Components**

Chemical Name	CAS-No	Weight %
Mineral Base Stock	MIXTURE	90-95

**4. FIRST AID MEASURES**

**4.1 First Aid Measures**

- General Advice** If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
- Eye Contact** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
- Skin Contact** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
- Inhalation** Move to fresh air in case of accidental inhalation of vapors. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician immediately.
- Ingestion** Do not induce vomiting without medical advice. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Call a physician or Poison Control Center immediately.
- Protection of First-aiders** Use personal protective equipment. Avoid contact with skin, eyes and clothing.

**4.2 Most important symptoms and effects, both acute and delayed**

- Symptoms** No information available.

**4.3 Indication of any immediate medical attention and special treatment needed**

- Notes to Physician** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

- Flammable Properties** NFPA: Class IIIB Combustible Liquid

**5.1 Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

**Unsuitable Extinguishing Media**

No information available.

**5.2 Specific Hazards Arising from the Chemical**

Keep product and empty container away from heat and sources of ignition.

**Hazardous combustion products:**

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and / or irritating. Combustion products may include and are not limited to, Carbon oxides, Calcium Oxides (CaOx), Hydrogen Sulfide, Nitrogen oxides (NOx), Oxides of Phosphorus, Sulphur oxides, Zinc oxides.

**5.3 Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

**Personal precautions**

Avoid contact with the skin and the eyes. Use personal protective equipment. Remove all sources of ignition. Avoid breathing vapors or mists. Ensure adequate ventilation.

**6.2 Environmental Precautions**

**Environmental Precautions**

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas. Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 3 for Significant Hazards. See Section 5 for fire fighting information. See Section 4 for First Aid Advice. See Section 8 for Personal Protective Equipment.

**6.3 Methods and material for containment and cleaning up**

**Methods for Clean-up**

Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Pick up and transfer to properly labeled containers.

**Spill Management**

**LARGE SPILLS**

Eliminate sources of ignition. Prevent additional discharge of material if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 15 Regulatory Information) notify the National Response Center.

**WATER SPILLS**

Prevent liquid entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Recover by pumping or with suitable absorbent. If liquid is too viscous for pumping, scrape up. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

**7. HANDLING AND STORAGE**

**7.1. Precautions for safe handling**

**Handling**

Wear personal protective equipment. Do not breathe vapors or spray mist. Remove and wash contaminated clothing before re-use. Keep away from open flames, hot surfaces and sources of ignition. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors).

**Safe Handling Advice**

Handle in accordance with good industrial hygiene and safety practices.

7.2. Conditions for safe storage, including any incompatibilities

**Storage**

Keep in properly labeled containers. Keep container tightly closed in a dry and well-ventilated place.

**Incompatible Materials and/or Coatings**

No information available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 Control parameters

**Exposure Guidelines**

No exposure limits established

Chemical Name	ACGIH TLV	OSHA PEL	Ontario TWAEV	Mexico (INSQ)	NIOSH IDLH	ILA Internal Exposure Limit
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene						8h TWA: 1 mg/m <sup>3</sup> (Inhalable) Toxic effects on blood expected upon exposure
Ethylene glycol	Ceiling: 100 mg/m <sup>3</sup>		CEV: 100 mg/m <sup>3</sup>	Ceiling: 100 mg/m <sup>3</sup>		

**Other Exposure Guidelines (If Generated)**

Chemical Name	OSHA PEL	ACGIH TLV	ACGIH OEL (STEL)	NIOSH REL TWA	ILA IHG	ILA ROEG	ILA Internal Exposure Limit
Oil mist, mineral	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>		TWA 5 mg/m <sup>3</sup> ST 10 mg/m <sup>3</sup>			
Hydrogen sulfide	Ceiling: 20 ppm	TWA: 1 ppm STEL: 5 ppm	5 ppm				

8.2. Exposure controls

**Appropriate engineering controls**

Ensure adequate ventilation, especially in confined areas. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

**Personal Protective Equipment**

**Eye/face protection**

Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If splashes are likely to occur wear tight fitting safety goggles and/or face-shield.

**Skin protection**

Wear protective gloves/clothing. Use clean protective clothing if splashing or spraying conditions are present. Protective clothing may include long-sleeve outer garment, apron, or lab coat. **Glove Type:** Neoprene, Nitriles.

**Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**

When using, do not eat, drink or smoke. Clean equipment, work area and clothing regularly.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1. Information on basic physical and chemical properties**

Appearance	Yellow Brown / Clear
Physical State	Liquid
Odor	Mild
Odor Threshold	No information available
pH	Not applicable
Melting point / melting range	Not applicable
Boiling point / boiling range	No information available
Flash Point	> 200 °C / 392 °F COC ASTM D92
Evaporation Rate	No information available
Flammability Limit in Air	No information available
Explosion Limits	No information available
Vapor Pressure	No information available
Vapor Density (Air)	No information available
Density	0.87 g/cm <sup>3</sup> @15°C
Solubility	No information available
Partition Coefficient (n-octanol/water)	No information available
Autoignition Temperature	No information available
Decomposing Temperature	No information available
Viscosity	@ 40C = 92.76 cSt; @ 100C = 13.71 cSt

**Other Information**

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

Reactivity The product is chemically stable

**10.2 Chemical stability**

Chemical Stability Stable under normal conditions.

**10.3 Possibility of Hazardous Reactions**

Possibility of Hazardous Reactions None under normal processing.

Hazardous Polymerization None under normal processing.

**10.4 Conditions to Avoid**

Conditions to Avoid Heat, flames and sparks.

**10.5 Incompatible Materials**

Incompatible Materials Strong oxidizing agents.

**10.6 Hazardous Decomposition Products**

**Hazardous decomposition products**

Thermal decomposition may produce hydrogen sulfide and other sulfur-containing gases at temperatures greater than 150F.

**11. TOXICOLOGICAL INFORMATION**

**11.1 Information on likely routes of exposure**

- Inhalation** May cause irritation of respiratory tract.
- Eye contact** May cause slight irritation.
- Skin Contact** May be harmful in contact with skin.
- Ingestion** May be harmful if swallowed.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lubricating oils, petroleum, C20-50, hydrotreated neutral oil-based 72623-87-1	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	>5.2 mg/L ( Rat ) 4 h
Petroleum distillates, hydrotreated heavy paraffinic 64742-54-7	> 5000 mg/kg	> 2000 mg/kg	>5 mg/L 4h (Rat)
Petroleum distillates, solvent-refined heavy paraffinic 64741-88-4	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	2.18 mg/L ( Rat ) 4 h
White mineral oil 8042-47-5	> 5000 mg/kg ( Rat )		>5.2 mg/L (Rat) 4h
Petroleum distillates, solvent-refined heavy paraffinic 64741-88-4	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	2.18 mg/L ( Rat ) 4 h
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts 68649-42-3	3080 mg/kg (rat)	>2000 mg/kg (rat)	
01154100-5031P	> 5000 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	
Carbonic acid, calcium salt (1:1) 471-34-1	= 6450 mg/kg ( Rat )		
distillates (petroleum), hydrotreated light 64742-47-8	> 5000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	5.2 mg/L ( Rat ) 4 h
Ethylene glycol 107-21-1	4000 - 10200 mg/kg ( Rat )	= 10600 mg/kg ( Rat ) = 9530 μL/kg ( Rabbit )	
Poly(dimethylsiloxane) 63148-62-9	> 17 g/kg ( Rat )	> 2 g/kg ( Rabbit )	
Cyclosilanes, dimethyl- 69430-24-6	> 16 mL/kg ( Rat )	> 16 mL/kg ( Rabbit )	

**11.2 Information on toxicological effects**

- Symptoms** No information available.

**11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure**

- Skin corrosion/irritation** No information available.
- Serious eye damage/eye irritation** No information available.

**Sensitization** No information available.

**Mutagenic effects** No information available.

**11.4 Carcinogenicity**

**Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, OSHA, or ACGIH. This product has been demonstrated to contain less than 3% extractables by the IP 346 test and therefore is not carcinogenic or mutagenic. This product shares a CAS number with other substances, "Extracts of steam-refined and air-refined bitumens," that have been classified as possibly carcinogenic to humans (Group 2B) by the International Agency for Research on Cancer (IARC). However, this product is neither steam nor air refined. It is within the IARC class, Bitumens 'not classifiable as to their carcinogenicity to humans (Group 3)'.

Chemical Name	ACGIH	IARC	NTP	OSHA	Mexico (INSQ)
Petroleum distillates, hydrotreated heavy paraffinic - 64742-54-7		Group 1			
Petroleum distillates, solvent-refined heavy paraffinic - 64741-88-4		Group 1			
Petroleum distillates, solvent-refined heavy paraffinic - 64741-88-4		Group 1			
Petroleum distillates, hydrotreated heavy paraffinic - 64742-54-7		Group 1			
Petroleum distillates, solvent dewaxed heavy paraffinic - 64742-65-0		Group 1			
Petroleum distillates, solvent dewaxed light paraffinic - 64742-56-9		Group 1			
Petroleum distillates, solvent dewaxed heavy paraffinic - 64742-65-0		Group 1			
Ethylene glycol - 107-21-1					\$ A4 - Not classifiable as a human carcinogen A3*

**Legend:**

NTP: (National Toxicity Program), ACGIH: (American Conference of Governmental Industrial Hygienists), IARC: (International Agency for Research on Cancer), OSHA: (Occupational Safety & Health Administration)

**Reproductive Effects** Not available.

**STOT - single exposure** None known.

**STOT - repeated exposure** None known.

**Chronic Toxicity** Avoid repeated exposure.

**Aspiration hazard** No information available.

**11.5 Acute Toxicity**

**Unknown acute toxicity** 3.902% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document .



**Product Information (Estimated):**

ATEmix (oral) >5000 mg/kg  
 ATEmix (dermal) 2281 mg/kg  
 ATEmix (inhalation-dust/mist) 20.3 mg/l

**12. ECOLOGICAL INFORMATION**

**12.1 Ecotoxicity**

**Ecotoxicity effects**

Harmful to aquatic life  
 Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

**Unknown aquatic toxicity**

4.1850000001% of the mixture consists of components(s) of unknown hazards to the aquatic environment

**12.2 Persistence and degradability**

No information available.

**12.3 Bioaccumulation/Accumulation**

No information available

**12.4. Mobility in soil**

No information available

**PBT and vPvB assessment**

No information available

**12.5 Other adverse effects:**

No information available

Chemical Name	log Pow
White mineral oil 8042-47-5	>6
Ethylene glycol 107-21-1	-1.93

**13. DISPOSAL CONSIDERATIONS**

**Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.**

To minimize exposure, see Section 8 (Exposure Controls/Personal Protection) of the SDS.

**Waste Disposal Method**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

**Contaminated packaging**

Dispose of in accordance with local regulations.

**14. TRANSPORT INFORMATION**

**DOT**

Not regulated

IATA Not regulated

IMDG/IMO Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

<b>TSCA</b>	All ingredients are on the inventory or exempt from listing
<b>DSL</b>	All ingredients are on the inventory or exempt from listing
<b>NDSL</b>	Not Listed
<b>EINECS</b>	Does not comply
<b>ELINCS</b>	Contains an ELINCS substance
<b>ENCS</b>	Does not comply
<b>CHINA</b>	All ingredients are on the inventory or exempt from listing
<b>KECL</b>	All ingredients are on the inventory or exempt from listing
<b>PICCS</b>	All ingredients are on the inventory or exempt from listing
<b>AICS</b>	All ingredients are on the inventory or exempt from listing
<b>NZIoC</b>	All ingredients are on the inventory or exempt from listing
<b>Mexico (INSQ)</b>	Does not comply

**USA**

**Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazardous Categorization**

<b>Acute Health Hazard</b>	No
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**CERCLA/SARA 302 & 304**

Section 302 & 304 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 355.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product contains the following HAPs:

Chemical Name	CAS-No	Weight %	HAPS data
Ethylene glycol	107-21-1	<0.1	

**State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**State Right-to-Know**

Chemical Name	CAS-No	New Jersey
Petroleum distillates, hydrotreated heavy paraffinic	64742-54-7	X
Petroleum distillates, solvent-refined heavy paraffinic	64741-88-4	X

**New Jersey Worker and Community Right-to-Know Act:**

Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows: PETROLEUM OIL (Lubricating Oil)

**Canada**

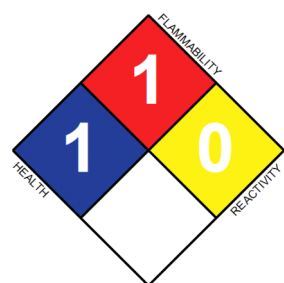
This material has been classified in accordance with the WHMIS 2015 regulation

Chemical Name	CAS-No	Weight %	NPRI
White mineral oil	8042-47-5	<5	Listed
Petroleum distillates, hydrotreated light	64742-47-8	<0.1	Listed
Ethylene glycol	107-21-1	<0.02	Listed

**Legend**

NPRI - National Pollutant Release Inventory

**16. OTHER INFORMATION**



NFPA

Health: 1

Flammability: 1

Instability 0

**Prepared By** Susie Bibb  
**Revision Date:** 31-Mar-2015

**Revision Summary:** GHS SDS format

**Disclaimer:**

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**



# SAFETY DATA SHEET

Lucas Red "N" Tacky NLGI # 2 grease

## Section 1. Identification

GHS product identifier : Lucas Red "N" Tacky NLGI # 2 grease  
Other means of identification : Not available.  
Product number : 10005, 10027, 10028, 10029, 10574

### Relevant identified uses of the substance or mixture and uses advised against

Engine oil.

Supplier's details : Lucas Oil Products, Inc  
302 North Sheridan Street  
Corona, California 92880-2067  
Toll Free: (800) 342-2512  
Tel: (951) 270-0154  
Fax: (951) 270-1902  
Website: www.LucasOil.com

Emergency telephone number (with hours of operation) : (951) 493-1149  
(951) 847-5949  
Markn@lucasoil.com

7:00A.M. to 5:00P.M. Monday thru Friday

## Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
AQUATIC HAZARD (LONG-TERM) - Category 3

### GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Causes serious eye damage.  
Harmful to aquatic life with long lasting effects.

### Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Wear eye or face protection. Avoid release to the environment. Wash hands thoroughly after handling.



## Section 2. Hazards identification

- Response** : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
- Storage** : Not applicable.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

### CAS number/other identifiers

- CAS number** : Not applicable.
- Product code** : Not available.

Ingredient name	%	CAS number
ZincAlkyldithiophosphate	1 - 5	68649-42-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.



## Section 4. First aid measures

**Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.  
**Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : May cause burns to mouth, throat and stomach.

#### Over-exposure signs/symptoms

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.  
**Specific treatments** : No specific treatment.  
**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.  
**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : No specific data.



## Section 5. Fire-fighting measures

**Special protective actions for fire-fighters** : No special precaution is required.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

**Small spill** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.



## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

None.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Solid. [Grease.]
- Color** : Red.
- Odor** : Mild. Petroleum oil.
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point** : Not available.
- Boiling point** : Not available.



## Section 9. Physical and chemical properties

Flash point	: Not available.
Burning time	: Not available.
Burning rate	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 0.9
Solubility	: Negligible at 25°C
Solubility in water	: 0 g/l
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Kinematic (100°C (212°F)): 0.19 cm <sup>2</sup> /s (19 cSt)

## Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Excessive heat.
Incompatible materials	: Reactive or incompatible with the following materials: strong oxidizers.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

There is no data available.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Zinc Alkyldithiophosphate	Eyes - Irritant	Rabbit	-	-	-

#### Sensitization

Skin	: There is no data available.
Respiratory	: There is no data available.



## Section 11. Toxicological information

### Mutagenicity

There is no data available.

### Carcinogenicity

There is no data available.

### Reproductive toxicity

There is no data available.

### Teratogenicity

There is no data available. Specific target organ toxicity (single exposure) There is no data available. Specific target organ toxicity (repeated exposure) There is no data available.

### Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

### Potential acute health effects

Eye contact : Causes serious eye damage.  
 Inhalation : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.  
 Skin contact : No known significant effects or critical hazards.  
 Ingestion : May cause burns to mouth, throat and stomach.

### Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.  
 Inhalation : No known significant effects or critical hazards.  
 Skin contact : No known significant effects or critical hazards.  
 Ingestion : No known significant effects or critical hazards.

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

Potential immediate effects : No known significant effects or critical hazards.  
 Potential delayed effects : No known significant effects or critical hazards.

#### Long term exposure

Potential immediate effects : No known significant effects or critical hazards.  
 Potential delayed effects : No known significant effects or critical hazards.

### Potential chronic health effects

General : No known significant effects or critical hazards.  
 Carcinogenicity : No known significant effects or critical hazards.  
 Mutagenicity : No known significant effects or critical hazards.  
 Teratogenicity : No known significant effects or critical hazards.  
 Developmental effects : No known significant effects or critical hazards.



## Section 11. Toxicological information

**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

There is no data available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Zinc Alkyldithiophosphate	Acute EC50 1 to 5 mg/L Acute EC50 1 to 1.5 mg/L Chronic LC50 1 to 5 mg/L	Algae Crustaceans Fish	96 hours 48 hours 96 hours

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

There is no data available.

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : There is no data available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.



## Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

**Special precautions for user** : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : TSCA 8(a) PAIR: Zinc Alkyldithiophosphate  
 TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
 United States inventory (TSCA 8b): All components are listed or exempted.  
 Clean Water Act (CWA) 307: Zinc Alkyldithiophosphate

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.



## Section 15. Regulatory information

### SARA 311/312

Classification : Immediate (acute) health hazard

### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Zinc Alkyldithiophosphate	1 - 5	No.	No.	No.	Yes.	No.

### SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Zinc Alkyldithiophosphate	68649-42-3	1 - 5
Supplier notification	Zinc Alkyldithiophosphate	68649-42-3	1 - 5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- Massachusetts : None of the components are listed.  
 New York : None of the components are listed.  
 New Jersey : The following components are listed: Distillates (petroleum), hydrotreated heavy naphthenic; Distillates (petroleum), solvent-dewaxed heavy paraffinic; Zinc Alkyldithiophosphate  
 Pennsylvania : The following components are listed: Zinc Alkyldithiophosphate  
 California Prop. 65

No products were found.

### International regulations

- International lists : Australia inventory (AICS): All components are listed or exempted.  
 China inventory (IECSC): All components are listed or exempted.  
 Japan inventory: Not determined.  
 Korea inventory: All components are listed or exempted.  
 Malaysia Inventory (EHS Register): Not determined.  
 New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.  
 Philippines inventory (PICCS): All components are listed or exempted.  
 Taiwan inventory (CSNN): Not determined.
- Chemical Weapons Convention List Schedule I Chemicals : Not listed
- Chemical Weapons Convention List Schedule II Chemicals : Not listed
- Chemical Weapons Convention List Schedule III Chemicals : Not listed

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

Health : 2 \* Flammability : 0 Physical hazards : 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

### National Fire Protection Association (U.S.A.)

Health : 2 Flammability : 0 Instability : 0

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

### History

Date of issue mm/dd/yyyy : 02/15/2014  
 Version : 1  
 Revised Section(s) : Not applicable.  
 Prepared by : KMK Regulatory Services Inc.

Key to abbreviations : ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 UN = United Nations

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.





# SAFETY DATA SHEET

P91010

## Section 1. Identification

**Product name** : ROTANIUM ETP Gold Cutting Fluid  
**Product code** : P91010  
**Other means of identification** : Not available.  
**Product type** : Liquid.  
**Relevant identified uses of the substance or mixture and uses advised against**  
Not applicable.

**Supplier** : Lawson Products, Inc.  
8770 W. Bryn Mawr, Suite 900  
Chicago, IL 60631-3515  
773-304-5050

**Emergency telephone number of the company** : (888) 426-4851

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
**Classification of the substance or mixture** : SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
CARCINOGENICITY - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 60.8%

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger  
**Hazard statements** : Causes serious eye damage.  
Suspected of causing cancer.  
May cause damage to organs through prolonged or repeated exposure.

### Precautionary statements

**Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear eye or face protection. Do not breathe vapor. Wash hands thoroughly after handling.

**Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

**Storage** : Store locked up.

## Section 2. Hazards identification

<b>Disposal</b>	Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Supplemental label elements</b>	WARNING: This product contains a chemical known to the State of California to cause cancer. FOR INDUSTRIAL USE ONLY.  Please refer to the SDS for additional information. Do not transfer contents to other containers for storage.
<b>Hazards not otherwise classified</b>	: None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: Mixture
<b>Other means of identification</b>	: Not available.

### CAS number/other identifiers

<b>Ingredient name</b>	<b>% by weight</b>	<b>CAS number</b>
Oxirane, methyl-, polymer with oxirane, monobutyl ether	41.8	9038-95-3
Triethanolamine	8.5	102-71-6
Diethanolamine	1.3	111-42-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
<b>Inhalation</b>	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Skin contact</b>	: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b>	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.



## Section 4. First aid measures

Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : May cause burns to mouth, throat and stomach.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

## Section 5. Fire-fighting measures

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

<b>Ingredient name</b>	<b>Exposure limits</b>
Triethanolamine 2,2'-iminodiethanol	<b>ACGIH TLV (United States, 4/2014).</b> TWA: 5 mg/m <sup>3</sup> 8 hours. <b>NIOSH REL (United States, 10/2013).</b> TWA: 3 ppm 10 hours. TWA: 15 mg/m <sup>3</sup> 10 hours. <b>ACGIH TLV (United States, 4/2014).</b> <b>Absorbed through skin.</b> TWA: 1 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction and vapor

#### **Appropriate engineering controls**

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

#### **Environmental exposure controls**

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

#### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### Skin protection

#### **Hand protection**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### **Other skin protection**

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### **Respiratory protection**

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

### Appearance

Physical state	: Liquid.
Color	: Not available.
Odor	: Not available.
Odor threshold	: Not available.
pH	: 9
Melting point	: Not available.
Boiling point	: 100°C (212°F)
Flash point	: Closed cup: 100°C (212°F) [Tagliabue Closed Cup]
Evaporation rate	: 0.09 (butyl acetate = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.6%
Vapor pressure	: 0.31 kPa (2.333 mm Hg) [at 20°C]
Vapor density	: 1 [Air = 1]
Relative density	: 1.06
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Kinematic (room temperature): >0.205 cm <sup>2</sup> /s (>20.5 cSt) Kinematic (40°C (104°F)): >0.205 cm <sup>2</sup> /s (>20.5 cSt)

## Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Triethanolamine	LD50 Oral	Rat	7.39 g/kg	-

#### Irritation/Corrosion

## Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
Oxirane, methyl-, polymer with oxirane, monobutyl ether	Eyes - Severe irritant	Rabbit	-	50 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
Triethanolamine	Eyes - Mild irritant	Rabbit	-	10 milligrams	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Human	-	72 hours 15 milligrams Intermittent	-
	Skin - Severe irritant	Mouse	-	50 Percent	-
2,2'-iminodiethanol	Skin - Mild irritant	Rabbit	-	24 hours 560 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	5500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	50 milligrams	-

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Classification

Product/ingredient name	OSHA	IARC	NTP
Triethanolamine	-	3	-
2,2'-iminodiethanol	-	2B	-

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
2,2'-iminodiethanol	Category 2	Not determined	Not determined

### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

- Eye contact** : Causes serious eye damage.
- Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : May cause burns to mouth, throat and stomach.

**Symptoms related to the physical, chemical and toxicological characteristics**

- Eye contact** : Adverse symptoms may include the following:
  - pain
  - watering
  - redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
  - pain or irritation
  - redness
  - blistering may occur
- Ingestion** : Adverse symptoms may include the following:
  - stomach pains

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

**Long term exposure**

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

**Potential chronic health effects**

Not available.

- General** : May cause damage to organs through prolonged or repeated exposure.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

<b>Route</b>	<b>ATE value</b>
Oral	15076.9 mg/kg

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Triethanolamine	Acute EC50 609.98 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
2,2'-iminodiethanol	Acute LC50 11800000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 16000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute EC50 12 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 28800 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 2150 µg/l Fresh water	Daphnia - Daphnia pulex	48 hours
	Acute LC50 775 mg/l Fresh water	Fish - Lepomis macrochirus	96 hours

### Persistence and degradability

Not available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Triethanolamine	-	<3.9	low

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-

## Section 14. Transport information

<b>Packing group</b>	-	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.	No.
<b>Additional information</b>	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Special provisions</u> Not Applicable	<u>Emergency schedules (EmS)</u> Not Applicable

**Special precautions for user :** Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code :** Not available.

## Section 15. Regulatory information

**U.S. Federal regulations :**  
**State regulations**  
California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

## Section 16. Other information

### Hazardous Material Information System (U.S.A.)

<b>Health</b>	2
<b>Flammability</b>	1
<b>Physical hazards</b>	0

**Caution:** HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA).

The customer is responsible for determining the PPE code for this material.



## Section 16. Other information

### [Notice to reader](#)

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.

**SAFETY DATA SHEET**

**1. Product And Company Identification**

SDS ID: SDS 380  
PRODUCT: PRESTONE® RV ANTIFREEZE  
PRODUCT NUMBER: AF-222  
FORMULA NUMBER: YA-955, YA-967

MANUFACTURER:  
Prestone Products Corporation  
Danbury, CT 06810-5109

CANADIAN OFFICE:  
FRAM Group (Canada), Inc.  
Mississauga, Ontario L5L 3S6

**MEDICAL EMERGENCIES AND ALL OTHER INFORMATION PHONE NUMBER:**

(800)890-2075 (in the US)

(800)668-9349 (in Canada)

**TRANSPORTATION EMERGENCY PHONE NUMBER (Chemical Spills and Transport Accidents only):**

CHEMTREC 1-800-424-9300 (in the US)

CANUTEC (613)996-6666 (in Canada)

SDS DATE OF PREPARATION/REVISION: 06/25/13

PRODUCT USE: Antifreeze for water systems in recreational vehicles, boats, vacation homes and swimming pools - consumer product

**2. Hazards Identification**

GHS Classification: Not Hazardous

Label Elements: None Required

**3. Composition/Information On Ingredients**

Component	CAS No.	Amount
Water	7732-18-5	60-80%
Propylene Glycol	57-55-6	20-40%

The exact concentrations are a trade secret.

**4. First Aid Measures**

INHALATION: No adverse effects are expected, however, if irritation or other symptoms develop, remove to fresh air. Seek medical attention if symptoms persist.

SKIN CONTACT: Remove contaminated clothing and wash skin with soap and water. Seek medical attention if irritation develops.

EYE CONTACT: Immediately flush with water, holding open eyelids, for 15 minutes. Seek medical attention if irritation persists.

INGESTION: If large amounts are swallowed, seek medical attention. Never give anything by mouth to or induce vomiting in an unconscious or drowsy person.

MOST IMPORTANT SYMPTOMS: May cause eye irritation. Ingestion of large amounts may cause acidosis and central nervous system effects.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT, IF NEEDED: Seek immediate medical attention for large ingestions.

NOTES TO PHYSICIAN: Following acute ingestion signs of toxicity unlikely. Ethanol treatment as in ethylene glycol poisoning is inappropriate. There is no specific antidote. Treatment should be directed at the control of symptoms and the clinical condition. Monitor for acidosis and central nervous system effects.

#### 5. Firefighting Measures

SUITABLE EXTINGUISHING MEDIA: For large fires, use alcohol type or all purpose foam. For small fires, use water spray, carbon dioxide or dry chemical.

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL: A solid stream of water or foam directed into hot, burning liquid can cause frothing. Heat from fire may generate flammable vapor. Fine sprays or mists may be combustible at temperatures below the normal flash point. Burning may produce carbon monoxide and carbon dioxide.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHERS: Firefighters should wear positive pressure self- contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored. Cool exposed container with water spray or fog. Burning liquid may float on water.

#### 6: Accidental Release Measures

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Wear appropriate protective clothing and equipment (See Section 8).

METHODS AND MATERIALS FOR CONTAINMENT/CLEANUP: Collect with absorbent material and place in appropriate, labeled container for disposal or, if permitted flush spill area with water.

#### 7. Handling and Storage

##### PRECAUTIONS FOR SAFE HANDLING:

Avoid eye and prolonged or repeated skin contact.

Avoid breathing vapors or mists.

Wash exposed skin thoroughly with soap and water after use.

Keep container away from open flames and excessive heat.

Do not reuse empty containers unless properly cleaned.

Empty containers retain product residue and may be dangerous. Do not cut, weld, drill, etc. containers, even empty.

Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into vacuum equipment, may result in ignitions without any obvious ignition sources. Published "auto ignition" or "ignition" temperatures cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Use of this product in elevated temperature applications should be thoroughly evaluated to assure safe operating conditions.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

NFPA CLASSIFICATION: Not applicable

#### 8. Exposure Controls / Personal Protection

**EXPOSURE GUIDELINES**

CHEMICAL	EXPOSURE LIMIT
Water	None Established
Propylene Glycol	10 mg/m <sup>3</sup> TWA AIHA WEEL

APPROPRIATE ENGINEERING CONTROLS: Use general ventilation or local exhaust as required to minimize exposures.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: None normally needed.

GLOVES: None normally needed. For prolonged contact rubber or neoprene gloves can be worn.

EYE PROTECTION: Safety glasses or goggles recommended if splashing is possible.

OTHER PROTECTIVE EQUIPMENT/CLOTHING: Appropriate protective clothing as needed to minimize skin contact.

**9. Physical and Chemical Properties**

APPEARANCE:	Red-orange liquid	ODOR:	Characteristic odor
ODOR THRESHOLD:	Not determined	pH:	9.2
MELTING/FREEZING POINT:	6-13°F ((-14.4)-(-10.6°C))	BOILING POINT/RANGE:	214-218°F (101.1-103.3°C)
FLASH POINT:	>215°F (>101.6°C) Seta CC	EVAPORATION RATE:	Not determined
FLAMMABILITY (SOLID, GAS)	Not Applicable	FLAMMABILITY LIMITS:	LEL: 2.6% (propylene glycol) UEL: 12.5% (propylene glycol)
VAPOR PRESSURE:	0.075 mmHg @ 20°C	VAPOR DENSITY:	Greater than 1
RELATIVE DENSITY:	1.01-1.03	SOLUBILITIES	Water: Complete
PARTITION COEFFICIENT (n-octanol/water)	Not determined	AUTOIGNITION TEMPERATURE:	Not determined
DECOMPOSITION TEMPERATURE:	Not determined	VISCOSITY:	Not determined

**10. Stability and Reactivity**

REACTIVITY: Normally uncreative.

CHEMICAL STABILITY: Stable.

POSSIBILITY OF HAZARDOUS REACTIONS: Reactions with strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds will generate heat.

CONDITIONS TO AVOID: None known.

INCOMPATIBLE MATERIALS: Strong acids, strong oxidizing agents, and materials reactive with hydroxyl compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide.

**11. Toxicological Information**

**POTENTIAL HEALTH EFFECTS:**

**ACUTE HAZARDS:**

**INHALATION:** No significant adverse health effects are expected from inhalation exposure.

**SKIN CONTACT:** No significant irritation is expected. Not expected to be absorbed through the skin

**EYE CONTACT:** Direct contact may cause stinging and tearing but no residual injury or discomfort.

**INGESTION:** Considered relatively non-toxic following acute ingestion, however, lactic acidosis, stupor and seizures have been reported following chronic ingestion and in individuals with underlying kidney disease.

**CHRONIC EFFECTS:** None currently known.

**CARCINOGENICITY LISTING:** None of the components of this product are listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA.

**ACUTE TOXICITY VALUES:**

Propylene Glycol: LD50 Oral Rat: 20,000 mg/kg

LD50 Skin Rabbit: 20,800 mg/kg

**SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH:** This product contains less than 0.2% tolyltriazole which has demonstrated mutagenic activity in a bacterial test system. A correlation has been established between mutagenic activity and carcinogenic activity for many chemicals. Tolyltriazole has not been identified as a carcinogen or probable carcinogen by NTP, IARC, ACGIH, or OSHA.

**12. Ecological Information**

**ECOTOXICITY:**

Propylene Glycol: LC50: Daphnia magna, 43,500 mg/L/ 48 hr; LC50: Pimephales promelas, 46,500 mg/L/ 96 hr

**PERSISTENCE AND DEGRADABILITY:** Propylene glycol achieved 64% of its theoretical BOD using a sewage inoculum and a 5 day incubation period

**BIOACCUMULATIVE POTENTIAL:** Propylene Glycol has an estimated BCF of 3 suggests the potential for bioconcentration in aquatic organisms is low.

**MOBILITY IN SOIL:** Propylene Glycol is expected to have very high mobility in soil.

**OTHER ADVERSE EFFECTS:** None known

**13. Disposal Considerations**

Dispose of product in accordance with all local, state/provincial and federal regulations.

**14. Transport Information**

U.S. DOT HAZARD CLASSIFICATION: Not Regulated

DOT MARINE POLLUTANTS: This product does not contain Marine Pollutants as defined in 49 CFR 171.8.

IMDG CODE SHIPPING CLASSIFICATION: Not Regulated

### 15. Regulatory Information

EPA SARA 311/312 HAZARD CLASSIFICATION: Not hazardous

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements under SARA Title III, Section 313 (40 CFR 372): None

PROTECTION OF STRATOSPHERIC OZONE: This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

CERCLA SECTION 103: This product is not subject to CERCLA reporting requirements; however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

CALIFORNIA PROPOSITION 65: This product does not contain substances known to the State of California to cause Cancer and/or Reproductive Harm.

EPA TSCA INVENTORY: All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CANADIAN WHMIS CLASSIFICATION: Not a controlled product.

CANADIAN WHMIS HAZARD SYMBOLS: Not applicable

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): All of the ingredients are listed on the EINECS inventory.

KOREA: All of the ingredients of this product are listed on the Korean Existing Chemicals List (KECL).

CHINA. All of the ingredients of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

### 16. Other Information

NFPA Rating: Fire: 1                      Health: 1                      Reactivity: 0

REVISION SUMMARY:      Correction to section 4.

SDS Date of Preparation/Revision: June 25, 2013

This SDS is directed to professional users and bulk handlers of the product. Consumer products are labeled in accordance with Federal Hazardous Substances Act regulations.

While Prestone Products Corporation believes that the data contained herein are factual and the opinions expressed are those of qualified experts regarding the results of tests conducted, the data are not to be taken as a warranty or representation for

which Prestone Products Corporation assumes legal responsibility. They are offered for your consideration, investigation and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.

If more information is needed, please contact:

Prestone Products Corporation  
69 Eagle Road  
Danbury, CT 06810  
(800) 890-2075

**Material Safety Data Sheet**

**1. MATERIAL AND COMPANY IDENTIFICATION**

**Material Name** : Shell Air Tool Oil S2 A 100  
**Uses** : Machine oil.

**Manufacturer/Supplier** : SOPUS Products  
 PO BOX 4427  
 Houston, TX 77210-4427  
 USA

**MSDS Request** : 877-276-7285

**Emergency Telephone Number**  
**Spill Information** : 877-242-7400  
**Health Information** : 877-504-9351

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Highly refined mineral oils and additives.  
 The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

**3. HAZARDS IDENTIFICATION**

<b>Emergency Overview</b>	
<b>Appearance and Odour</b>	: Amber. Liquid at room temperature. Slight hydrocarbon.
<b>Health Hazards</b>	: Not classified as dangerous for supply or conveyance.
<b>Safety Hazards</b>	: Not classified as flammable but will burn.
<b>Environmental Hazards</b>	: Not classified as dangerous for the environment.

**Health Hazards** : Not expected to be a health hazard when used under normal conditions.

**Health Hazards Inhalation** : Under normal conditions of use, this is not expected to be a primary route of exposure.

**Skin Contact** : Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

**Eye Contact** : May cause slight irritation to eyes.

**Ingestion** : Low toxicity if swallowed.

**Other Information** : Used oil may contain harmful impurities.

**Signs and Symptoms** : Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.

**Aggravated Medical Conditions** : Pre-existing medical conditions of the following organ(s) or organ system(s) may be aggravated by exposure to this material: Skin.

**Environmental Hazards** : Not classified as dangerous for the environment.

**Additional Information** : Under normal conditions of use or in a foreseeable emergency,



**Material Safety Data Sheet**

this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**4. FIRST AID MEASURES**

<b>General Information</b>	:	Not expected to be a health hazard when used under normal conditions.
<b>Inhalation</b>	:	No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
<b>Skin Contact</b>	:	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
<b>Eye Contact</b>	:	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
<b>Ingestion</b>	:	In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
<b>Advice to Physician</b>	:	Treat symptomatically.

**5. FIRE FIGHTING MEASURES**

Clear fire area of all non-emergency personnel.

<b>Flash point</b>	:	Typical 241 °C / 466 °F (COC)
<b>Upper / lower Flammability or Explosion limits</b>	:	Typical 1 - 10 %(V)(based on mineral oil)
<b>Auto ignition temperature</b>	:	> 320 °C / 608 °F
<b>Specific Hazards</b>	:	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
<b>Suitable Extinguishing Media</b>	:	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
<b>Unsuitable Extinguishing Media</b>	:	Do not use water in a jet.
<b>Protective Equipment for Firefighters</b>	:	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

**6. ACCIDENTAL RELEASE MEASURES**

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

<b>Protective measures</b>	:	Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
<b>Clean Up Methods</b>	:	Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an

**Material Safety Data Sheet**

**Additional Advice** : absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.  
 : Local authorities should be advised if significant spillages cannot be contained.

**7. HANDLING AND STORAGE**

**General Precautions** : Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

**Handling** : Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.

**Storage** : Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable containers. Storage Temperature: 0 - 50 °C / 32 - 122 °F

**Recommended Materials** : For containers or container linings, use mild steel or high density polyethylene.

**Unsuitable Materials** : PVC.

**Additional Information** : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Occupational Exposure Limits**

Material	Source	Type	ppm	mg/m3	Notation
Oil mist, mineral	ACGIH	TWA(Inhalable fraction.)		5 mg/m3	
Oil mist, mineral	OSHA Z1	PEL(Mist.)		5 mg/m3	
Oil mist, mineral	OSHA Z1A	TWA(Mist.)		5 mg/m3	

**Additional Information** : Shell has adopted as Interim Standards the OSHA Z1A values that were established in 1989 and later rescinded.

**Exposure Controls** : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

**Personal Protective Equipment** : Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

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- Respiratory Protection** : No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [boiling point >65°C(149 °F)].
- Hand Protection** : Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.
- Eye Protection** : Wear safety glasses or full face shield if splashes are likely to occur.
- Protective Clothing** : Skin protection not ordinarily required beyond standard issue work clothes.
- Monitoring Methods** : Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.
- Environmental Exposure Controls** : Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance : Amber. Liquid at room temperature.
- Odour : Slight hydrocarbon.
- pH : Not applicable.
- Initial Boiling Point and Boiling Range : > 280 °C / 536 °F estimated value(s)
- Pour point : Typical -24 °C / -11 °F
- Flash point : Typical 241 °C / 466 °F (COC)
- Upper / lower Flammability or Explosion limits : Typical 1 - 10 %(V) (based on mineral oil)
- Auto-ignition temperature : > 320 °C / 608 °F
- Vapour pressure : < 0.5 Pa at 20 °C / 68 °F (estimated value(s))
- Specific gravity : Typical 0.884 at 15 °C / 59 °F

**Material Safety Data Sheet**

Density	: Typical 884 kg/m <sup>3</sup> at 15 °C / 59 °F
Water solubility	: Negligible.
n-octanol/water partition coefficient (log Pow)	: > 6 (based on information on similar products)
Kinematic viscosity	: Typical 100 mm <sup>2</sup> /s at 40 °C / 104 °F
Vapour density (air=1)	: > 1 (estimated value(s))
Evaporation rate (nBuAc=1)	: Data not available

**10. STABILITY AND REACTIVITY**

<b>Stability</b>	: Stable.
<b>Conditions to Avoid</b>	: Extremes of temperature and direct sunlight.
<b>Materials to Avoid</b>	: Strong oxidising agents.
<b>Hazardous Decomposition Products</b>	: Hazardous decomposition products are not expected to form during normal storage.

**11. TOXICOLOGICAL INFORMATION**

<b>Basis for Assessment</b>	: Information given is based on data on the components and the toxicology of similar products.
<b>Acute Oral Toxicity</b>	: Expected to be of low toxicity: LD50 > 5000 mg/kg , Rat
<b>Acute Dermal Toxicity</b>	: Expected to be of low toxicity: LD50 > 5000 mg/kg , Rabbit
<b>Acute Inhalation Toxicity</b>	: Not considered to be an inhalation hazard under normal conditions of use.
<b>Skin Irritation</b>	: Expected to be slightly irritating.
<b>Eye Irritation</b>	: Expected to be slightly irritating.
<b>Respiratory Irritation</b>	: Inhalation of vapours or mists may cause irritation.
<b>Sensitisation</b>	: Not expected to be a skin sensitiser.
<b>Repeated Dose Toxicity</b>	: Not expected to be a hazard.
<b>Mutagenicity</b>	: Not considered a mutagenic hazard.
<b>Carcinogenicity</b>	: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.
<b>Reproductive and Developmental Toxicity</b>	: Not expected to be a hazard.
<b>Additional Information</b>	: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible.

**12. ECOLOGICAL INFORMATION**

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

<b>Acute Toxicity</b>	: Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 >
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## Material Safety Data Sheet

100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

- Mobility** : Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
- Persistence/degradability** : Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment.
- Bioaccumulation** : Contains components with the potential to bioaccumulate.
- Other Adverse Effects** : Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

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### 13. DISPOSAL CONSIDERATIONS

- Material Disposal** : Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
- Container Disposal** : Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
- Local Legislation** : Disposal should be in accordance with applicable regional, national, and local laws and regulations.

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### 14. TRANSPORT INFORMATION

**US Department of Transportation Classification (49CFR)**

This material is not subject to DOT regulations under 49 CFR Parts 171-180.

**IMDG**

This material is not classified as dangerous under IMDG regulations.

**IATA (Country variations may apply)**

This material is not classified as dangerous under IATA regulations.

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### 15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

#### Federal Regulatory Status

#### Notification Status

**Material Safety Data Sheet**

EINECS	All components listed or polymer exempt.
TSCA	All components listed.
DSL	All components listed.

Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA.

**SARA Hazard Categories (311/312)**

No SARA 311/312 Hazards.

**SARA Toxic Release Inventory (TRI) (313)**

Zinc alkyl dithiophosphate (68649-42-3)	0.90%
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**State Regulatory Status**

**California Safe Drinking Water and Toxic Enforcement Act (Proposition 65)**

This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**New Jersey Right-To-Know Chemical List**

Zinc alkyl dithiophosphate (68649-42-3)	Listed.
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**16. OTHER INFORMATION**

<b>NFPA Rating (Health, Fire, Reactivity)</b>	:	0, 1, 0
<b>MSDS Version Number</b>	:	1.0
<b>MSDS Effective Date</b>	:	03/03/2011
<b>MSDS Revisions</b>	:	A vertical bar ( ) in the left margin indicates an amendment from the previous version.
<b>MSDS Regulation</b>	:	The content and format of this MSDS is in accordance with the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<b>MSDS Distribution</b>	:	The information in this document should be made available to all who may handle the product.

**Material Safety Data Sheet**

**Disclaimer**

: The information contained herein is based on our current knowledge of the underlying data and is intended to describe the product for the purpose of health, safety and environmental requirements only. No warranty or guarantee is expressed or implied regarding the accuracy of these data or the results to be obtained from the use of the product.

# SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR  
1910.1200

Version 1.3

Revision Date: 08/27/2015

Print Date: 08/28/2015

## SECTION 1. IDENTIFICATION

Product name : Shell Tellus S2 V 68

Product code : 001D7751

### Manufacturer or supplier's details

Manufacturer/Supplier : **Shell Oil Products US**  
P.O. Box 4427  
Houston TX 77210-4427  
USA

SDS Request : (+1) 877-276-7285  
Customer Service :

### Emergency telephone number

Spill Information : 877-504-9351  
Health Information : 877-242-7400

### Recommended use of the chemical and restrictions on use

Recommended use : Hydraulic oil

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Not a hazardous substance or mixture.

### GHS Label element

Hazard pictograms : No Hazard Symbol required

Signal word : No signal word

Hazard statements : **PHYSICAL HAZARDS:**  
Not classified as a physical hazard under GHS criteria.  
**HEALTH HAZARDS:**  
Not classified as a health hazard under GHS criteria.  
**ENVIRONMENTAL HAZARDS:**  
Not classified as an environmental hazard under GHS criteria.

Precautionary statements : **Prevention:**  
No precautionary phrases.  
**Response:**  
No precautionary phrases.  
**Storage:**  
No precautionary phrases.  
**Disposal:**  
No precautionary phrases.

### Other hazards which do not result in classification

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.



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Used oil may contain harmful impurities.  
High-pressure injection under the skin may cause serious damage including local necrosis.  
Not classified as flammable but will burn.

The classification of this material is based on OSHA HCS 2012 criteria.

Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Highly refined mineral oils and additives.  
The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

\* contains one or more of the following CAS-numbers: 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-65-0, 68037-01-4, 72623-86-0, 72623-87-1, 8042-47-5, 848301-69-9.

### Hazardous components

Chemical Name	Synonyms	CAS-No.	Concentration (%)
Interchangeable low viscosity base oil (<20,5 cSt @40°C) *		Not Assigned	0 - 90

## SECTION 4. FIRST-AID MEASURES

General advice : Not expected to be a health hazard when used under normal conditions.

If inhaled : No treatment necessary under normal conditions of use.  
If symptoms persist, obtain medical advice.

In case of skin contact : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.  
If persistent irritation occurs, obtain medical attention.

When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop.  
Obtain medical attention even in the absence of apparent wounds.

In case of eye contact : Flush eye with copious quantities of water.  
If persistent irritation occurs, obtain medical attention.

If swallowed : In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

Most important symptoms : Oil acne/folliculitis signs and symptoms may include formation

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and effects, both acute and delayed

of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea. Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection.

Protection of first-aiders

: When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

Immediate medical attention, special treatment

: Treat symptomatically.

High pressure injection injuries require prompt surgical intervention and possibly steroid therapy, to minimise tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetics, and wide exploration is essential.

## SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

: Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

: Do not use water in a jet.

Specific hazards during fire-fighting

: Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.

Specific extinguishing methods

: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for firefighters

: Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Avoid contact with skin and eyes.

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- Environmental precautions : Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
- Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
- Additional advice : For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

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## SECTION 7. HANDLING AND STORAGE

- Technical measures : Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
- Precautions for safe handling : Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.
- Avoidance of contact : Strong oxidising agents.
- Product Transfer : This material has the potential to be a static accumulator. Proper grounding and bonding procedures should be used during all bulk transfer operations.
- Storage**
- Other data : Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers.
- Store at ambient temperature.

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- Packaging material : Suitable material: For containers or container linings, use mild steel or high density polyethylene.  
Unsuitable material: PVC.
- Container Advice : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Oil mist, mineral	Not Assigned	TWA ((inhalable fraction))	5 mg/m3	US. ACGIH Threshold Limit Values
		(Mist)	5 mg/m3	OSHA_TRANS

### Biological occupational exposure limits

No biological limit allocated.

### Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods <http://www.cdc.gov/niosh/>

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods <http://www.osha.gov/>

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances <http://www.hse.gov.uk/>

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA) , Germany <http://www.dguv.de/inhalt/index.jsp>

L'Institut National de Recherche et de Sécurité, (INRS), France <http://www.inrs.fr/accueil>

- Engineering measures** : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:  
Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

### General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

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Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

Practice good housekeeping.

## Personal protective equipment

Respiratory protection

- : No respiratory protection is ordinarily required under normal conditions of use.
- In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.
- If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.
- Check with respiratory protective equipment suppliers.
- Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.
- Select a filter suitable for the combination of organic gases and vapours [Type A/Type P boiling point >65°C (149°F)].

Hand protection  
Remarks

- : Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

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- Eye protection : If material is handled such that it could be splashed into eyes, protective eyewear is recommended.
- Skin and body protection : Skin protection is not ordinarily required beyond standard work clothes.  
It is good practice to wear chemical resistant gloves.
- Protective measures : Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

## Environmental exposure controls

- General advice : Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water.  
Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Liquid at room temperature.
- Colour : amber
- Odour : Slight hydrocarbon
- Odour Threshold : Data not available
- pH : Not applicable
- pour point : -30 °C / -22 °F Method: ISO 3016
- Initial boiling point and boiling range : > 280 °C / 536 °F estimated value(s)
- Flash point : 225 °C / 437 °F  
Method: ISO 2592
- Evaporation rate : Data not available
- Flammability (solid, gas) : Data not available
- Upper explosion limit : Typical 10 %(V)
- Lower explosion limit : Typical 1 %(V)
- Vapour pressure : < 0.5 Pa (20 °C / 68 °F)  
estimated value(s)
- Relative vapour density : > 1 estimated value(s)

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Relative density	: 0.877 (15 °C / 59 °F)
Density	: 877 kg/m <sup>3</sup> (15.0 °C / 59.0 °F) Method: ISO 12185
Solubility(ies)	
Water solubility	: negligible
Solubility in other solvents	: Data not available
Partition coefficient: n-octanol/water	: Pow: > 6(based on information on similar products)
Auto-ignition temperature	: > 320 °C / 608 °F
Viscosity	
Viscosity, dynamic	: Data not available
Viscosity, kinematic	: 68 mm <sup>2</sup> /s (40.0 °C / 104.0 °F) Method: ASTM D445
	10.5 mm <sup>2</sup> /s (100 °C / 212 °F) Method: ASTM D445
Conductivity	: This material is not expected to be a static accumulator.
Decomposition temperature	: Data not available

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity	: The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
Chemical stability	: Stable.
Possibility of hazardous reactions	: Reacts with strong oxidising agents.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Strong oxidising agents.
Hazardous decomposition products	: Hazardous decomposition products are not expected to form during normal storage.

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## SECTION 11. TOXICOLOGICAL INFORMATION

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Basis for assessment : Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

## Information on likely routes of exposure

Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

## Acute toxicity

### Product:

Acute oral toxicity : LD50 (rat): > 5,000 mg/kg  
Remarks: Expected to be of low toxicity:

Acute inhalation toxicity : Remarks: Not considered to be an inhalation hazard under normal conditions of use.

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg  
Remarks: Expected to be of low toxicity:

## Skin corrosion/irritation

### Product:

Remarks: Expected to be slightly irritating., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

## Serious eye damage/eye irritation

### Product:

Remarks: Expected to be slightly irritating.

## Respiratory or skin sensitisation

### Product:

Remarks: Not expected to be a skin sensitiser.

## Germ cell mutagenicity

### Product:

: Remarks: Not considered a mutagenic hazard.

## Carcinogenicity

### Product:

Remarks: Not expected to be carcinogenic.

Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

**IARC**

No component of this product present at levels greater than or



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equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

## ACGIH

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

## OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

## NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

## Reproductive toxicity

### Product:

:

Remarks: Not expected to impair fertility., Not expected to be a developmental toxicant.

## STOT - single exposure

### Product:

Remarks: Not expected to be a hazard.

## STOT - repeated exposure

### Product:

Remarks: Not expected to be a hazard.

## Aspiration toxicity

### Product:

Not considered an aspiration hazard.

## Further information

### Product:

Remarks: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal., ALL used oil should be handled with caution and skin contact avoided as far as possible.

Remarks: High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

Remarks: Slightly irritating to respiratory system.

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## SECTION 12. ECOLOGICAL INFORMATION

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Basis for assessment : Ecotoxicological data have not been determined specifically for this product.  
Information given is based on a knowledge of the components and the ecotoxicology of similar products.  
Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s). (LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract).

## Ecotoxicity

### Product:

Toxicity to fish (Acute toxicity) : Remarks: Expected to be practically non toxic:  
LL/EL/IL50 > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates (Acute toxicity) : Remarks: Expected to be practically non toxic:  
LL/EL/IL50 > 100 mg/l

Toxicity to algae (Acute toxicity) : Remarks: Expected to be practically non toxic:  
LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic toxicity) : Remarks: Data not available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: Data not available

Toxicity to bacteria (Acute toxicity) : Remarks: Data not available

## Persistence and degradability

### Product:

Biodegradability : Remarks: Expected to be not readily biodegradable.  
Major constituents are expected to be inherently biodegradable, but contains components that may persist in the environment.

## Bioaccumulative potential

### Product:

Bioaccumulation : Remarks: Contains components with the potential to bioaccumulate.

## Mobility in soil

### Product:

Mobility : Remarks: Liquid under most environmental conditions.  
If it enters soil, it will adsorb to soil particles and will not be mobile.

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Remarks: Floats on water.

## Other adverse effects

no data available

## Product:

Additional ecological information : Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

Poorly soluble mixture.  
May cause physical fouling of aquatic organisms.

Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

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## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.

Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

Contaminated packaging : Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

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## SECTION 14. TRANSPORT INFORMATION

### National Regulations

#### US Department of Transportation Classification (49 CFR Parts 171-180)

Not regulated as a dangerous good

### International Regulation

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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Pollution category : Not applicable  
Ship type : Not applicable  
Product name : Not applicable  
Special precautions : Not applicable

## Special precautions for user

Remarks : Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

**Additional Information** : MARPOL Annex 1 rules apply for bulk shipments by sea.

## SECTION 15. REGULATORY INFORMATION

**OSHA Hazards** : No OSHA Hazards

### EPCRA - Emergency Planning and Community Right-to-Know Act

#### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
methyl methacrylate	80-62-6	1000	*

\*: Calculated RQ exceeds reasonably attainable upper limit.

#### CERCLA Reportable Quantity

Calculated RQ exceeds reasonably attainable upper limit., Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA., The components with RQs are given for information.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### Clean Water Act

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

methyl methacrylate      80-62-6      0.0975 %

#### Pennsylvania Right To Know

methyl methacrylate      80-62-6

**California Prop 65**      This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**The components of this product are reported in the following inventories:**

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EINECS : All components listed or polymer exempt.  
TSCA : All components listed.  
DSL : All components listed.

## SECTION 16. OTHER INFORMATION

### Further information

NFPA Rating (Health, Fire, Reactivity) 0, 1, 0

A vertical bar (|) in the left margin indicates an amendment from the previous version.

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.

ACGIH = American Conference of Governmental Industrial Hygienists  
ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road  
AICS = Australian Inventory of Chemical Substances  
ASTM = American Society for Testing and Materials  
BEL = Biological exposure limits  
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes  
CAS = Chemical Abstracts Service  
CEFIC = European Chemical Industry Council  
CLP = Classification Packaging and Labelling  
COC = Cleveland Open-Cup  
DIN = Deutsches Institut für Normung  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
DSL = Canada Domestic Substance List  
EC = European Commission  
EC50 = Effective Concentration fifty  
ECETOC = European Center on Ecotoxicology and Toxicology Of Chemicals  
ECHA = European Chemicals Agency  
EINECS = The European Inventory of Existing Commercial Chemical Substances  
EL50 = Effective Loading fifty  
ENCS = Japanese Existing and New Chemical Substances Inventory  
EWC = European Waste Code  
GHS = Globally Harmonised System of Classification and Labelling of Chemicals  
IARC = International Agency for Research on Cancer  
IATA = International Air Transport Association  
IC50 = Inhibitory Concentration fifty  
IL50 = Inhibitory Level fifty  
IMDG = International Maritime Dangerous Goods  
INV = Chinese Chemicals Inventory  
IP346 = Institute of Petroleum test method N° 346 for the

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determination of polycyclic aromatics DMSO-extractables  
KECI = Korea Existing Chemicals Inventory  
LC50 = Lethal Concentration fifty  
LD50 = Lethal Dose fifty per cent.  
LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading  
LL50 = Lethal Loading fifty  
MARPOL = International Convention for the Prevention of  
Pollution From Ships  
NOEC/NOEL = No Observed Effect Concentration / No Ob-  
served Effect Level  
OE\_HPVS = Occupational Exposure - High Production Volume  
PBT = Persistent, Bioaccumulative and Toxic  
PICCS = Philippine Inventory of Chemicals and Chemical  
Substances  
PNEC = Predicted No Effect Concentration  
REACH = Registration Evaluation And Authorisation Of  
Chemicals  
RID = Regulations Relating to International Carriage of Dan-  
gerous Goods by Rail  
SKIN\_DES = Skin Designation  
STEL = Short term exposure limit  
TRA = Targeted Risk Assessment  
TSCA = US Toxic Substances Control Act  
TWA = Time-Weighted Average  
vPvB = very Persistent and very Bioaccumulative

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



# Sierra Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Product name : Sierra Concentrate Antifreeze & Coolant

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Automotive Engine Antifreeze & Coolant

#### 1.3. Details of the supplier of the safety data sheet

Old World Industries, LLC  
4065 Commercial Ave.  
Northbrook, IL 60062 - USA  
T (847) 559-2000  
[www.oldworldind.com](http://www.oldworldind.com)

#### 1.4. Emergency telephone number

Emergency number : (800) 424-9300; (703) 527 3887 (International)  
Chemtrec

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### GHS-US classification

Not classified

#### 2.2. Label elements

##### GHS-US labelling

Signal word (GHS-US) : None  
Hazard statements (GHS-US) : None  
Precautionary statements (GHS-US) : None

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product identifier	% by wt	GHS-US classification
propylene glycol	(CAS No) 57-55-6	94 - 96	Not classified
water	(CAS No) 7732-18-5	<= 4	Not classified

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Not expected to present a significant skin hazard under anticipated condition fo normal use.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth. Obtain emergency medical attention.

#### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.

# Sierra Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/injuries after skin contact	: Contact during a long period may cause slight irritation.
Symptoms/injuries after eye contact	: May cause slight irritation.
Symptoms/injuries after ingestion	: Excessive ingestion may cause central nervous system effects.

### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Alcohol-resistant foam. Dry chemical powder. Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

Reactivity : Stable.

### 5.3. Advice for firefighters

Special protective equipment for fire fighters : Protective fire fighting clothing (includes fire-fighting helmet, coat, pants, boots and gloves).  
Wear positive pressure self-contained breathing apparatus (SCBA).

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage. Contain released substance, pump into suitable containers.  
Methods for cleaning up : Notify authorities if product enters sewers or public waters. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. This material and its container must be disposed of in a safe way, and as per local legislation.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Personal protective equipment : Face shield. Protective goggles.



Hand protection : Not required for normal conditions of use.  
Eye protection : Chemical goggles or face shield.  
Respiratory protection : If exposed to levels above exposure limits wear appropriate respiratory protection.



# Sierra Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Green
Odor	: Odorless
Odor threshold	: No data available
Relative evaporation rate (butylacetate=1)	: Slight
Melting point	: -60 °C (-76 °F)
Freezing point	: No data available
Boiling point	: 154 °C (310 °F)
Flash point	: 104 °C (219 °F) Method used: Pensky-Martens Closed Cup
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: < 0.01 kPa (< 0.1 mm Hg)
Relative vapor density at 20 °C	: 2.6
Specific Gravity	: 1.04
Density	: 1.04 kg/l (8.7 lbs/gal)
Solubility	: Water: Complete
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.
Explosive limits	: 2.6 - 12.5 vol % <i>Estimated</i>

#### 9.2. Other information

No additional information available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Stable.

#### 10.2. Chemical stability

Stable.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

#### 10.4. Conditions to avoid

Heat. Open flame. Sparks.

#### 10.5. Incompatible materials

Keep away from strong acids, strong bases and oxidizing agents.

#### 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Not classified

<b>propylene glycol (57-55-6)</b>	
LD50 oral rat	20,000 mg/kg (Rat; Experimental value,Rat; Experimental value)
LD50 dermal rat	22,500 mg/kg (Rat; Experimental value,Rat; Experimental value)
LD50 dermal rabbit	20,800 mg/kg (Rabbit; Experimental value,Rabbit; Experimental value)
ATE US (oral)	20,000 mg/kg bodyweight

# Sierra Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

propylene glycol (57-55-6)	
ATE US (dermal)	20,800 mg/kg bodyweight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Symptoms/injuries after skin contact	: Contact during a long period may cause slight irritation.
Symptoms/injuries after eye contact	: May cause slight irritation.
Symptoms/injuries after ingestion	: Excessive ingestion may cause central nervous system effects.

## SECTION 12: Ecological information

### 12.1. Toxicity

propylene glycol (57-55-6)	
LC50 fish 1	51,400 mg/l (96 h; Pimephales promelas)
LC50 other aquatic organisms 1	> 1,000 mg/l (96 h)
EC50 Daphnia 1	34,400 mg/l (48 h; Daphnia magna)
LC50 fish 2	51,600 mg/l (96 h; Oncorhynchus mykiss)
TLM fish 1	> 1,000 ppm (96 h; Pisces)
TLM other aquatic organisms 1	> 1,000 ppm (96 h)
Threshold limit other aquatic organisms 1	> 1,000 mg/l (96 h)
Threshold limit algae 1	15,000 mg/l (336 h; Selenastrum capricornutum)
Threshold limit algae 2	< 5,300 mg/l (336 h; Skeletonema costatum)

### 12.2. Persistence and degradability

propylene glycol (57-55-6)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil.
Biochemical oxygen demand (BOD)	0.96 - 1.08 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.63 g O <sub>2</sub> /g substance
ThOD	1.69 g O <sub>2</sub> /g substance
BOD (% of ThOD)	0.57 % ThOD

### 12.3. Bioaccumulative potential

propylene glycol (57-55-6)	
Log Pow	-1.41 - -0.30
Bioaccumulative potential	Not bioaccumulative.

### 12.4. Mobility in soil

propylene glycol (57-55-6)	
Surface tension	0.036 N/m (25 °C)

### 12.5. Other adverse effects

Effect on ozone layer	: No known effect on the ozone layer
Effect on global warming	: No known ecological damage caused by this product.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste disposal recommendations	: Dispose of contents/container, in a safe manner, to appropriate waste disposal facility, in accordance with local/regional/national/international regulations.
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# Sierra Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### SECTION 14: Transport information

In accordance with DOT

Not a dangerous good in sense of transport regulations

Other information : Not regulated.

#### ADR

No additional information available

#### Transport by sea

No additional information available

#### Air transport

No additional information available

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

Sierra Concentrate Antifreeze & Coolant	
EPA TSCA Regulatory Flag	Toxic Substances Control Act (TSCA): The intentional ingredients of this product are listed

#### 15.2. International regulations

##### CANADA

Sierra Concentrate Antifreeze & Coolant	
WHMIS Classification	This product is not a WHMIS controlled product in Canada. Refer elsewhere in the SDS for specific warnings and safe handling information. Refer to the employer's workplace education program.

#### WHMIS Classification

This product is not a WHMIS controlled product in Canada. Refer elsewhere in the SDS for specific warnings and safe handling information.

Refer to the employer's workplace education program.

#### EU-Regulations

No additional information available

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

#### Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

#### 15.2.2. National regulations

Sierra Concentrate Antifreeze & Coolant	
DSL (Canada): The intentional ingredients of this product are listed	
ECL (South Korea): The intentional ingredients of this product are listed.	
EINECS (Europe): The intentional ingredients of this product are listed	
ENCS (Japan): The intentional ingredients of this product are listed	

#### 15.3. US State regulations

#### 1,2-propanediol (57-55-6)

U.S. - Pennsylvania - RTK (Right to Know) List

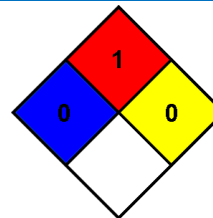
### SECTION 16: Other information

# Sierra Concentrate Antifreeze & Coolant

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
- NFPA fire hazard : 1 - Must be preheated before ignition can occur.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

- Health : 0 Minimal Hazard - No significant risk to health
- Flammability : 1 Slight Hazard
- Physical : 0 Minimal Hazard

SDS GHS US (GHS HazCom 2012) OWI

*Old World Industries, LLC makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by Old World Industries, LLC as to the effects of such use, the results to be obtained or the safety and toxicity of this product, nor does Old World Industries, LLC assume liability arising out of the use by others of this product referred to herein. The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.*

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# SAFETY DATA SHEET

SDS ID NO.: 0168MAR019  
Revision Date: 05/22/2015

## 1. IDENTIFICATION

**Product Name:** Marathon Petroleum Multi-purpose DM Automatic Transmission Fluid

**Synonym:** Marathon Multipurpose Automatic Transmission Fluid; Marathon Dexron-III/Mercon Automatic Transmission Fluid; Marathon Dexron-II Automatic Transmission Fluid; Marathon Dexron-III/Mercon Automatic Transmission Fluid; Marathon Multi-purpose ATF; Marathon Dexron ATF; Marathon Mercon ATF

**Chemical Family:** Hydrocarbon Mixture

**Recommended Use:** Automatic transmission fluid.  
**Use Restrictions:** All others.

**Supplier Name and Address:**  
**MARATHON PETROLEUM COMPANY LP**  
**539 South Main Street**  
**Findlay, OH 45840**

**SDS information:** 1-419-421-3070  
**Emergency Telephone:** 1-877-627-5463

## 2. HAZARD IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

#### **Hazards Not Otherwise Classified (HNOC)**

Not applicable

### Label elements

#### **EMERGENCY OVERVIEW**

No known significant effects or critical hazards.

**Appearance** Red Liquid

**Physical State** Liquid

**Odor** Petroleum

#### **Precautionary Statements - Prevention**

Not applicable

#### **Precautionary Statements - Response**

Not applicable

**Precautionary Statements - Storage**

Not applicable

**Precautionary Statements - Disposal**

Not applicable

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Automatic Transmission Fluid (ATF) is a complex mixture of highly refined lubricating oil base stocks and additives.

**Composition Information:**

Name	CAS Number	Weight %
Distillates (petroleum), hydrotreated light	64742-47-8	1-5

### 4. FIRST AID MEASURES

**First Aid Measures**

**General advice**

In case of accident or if you feel unwell, seek medical advice immediately (show directions for use or safety data sheet if possible).

**Inhalation:**

Remove to fresh air. If not breathing, institute rescue breathing. If breathing is difficult, ensure airway is clear, give oxygen and continue to monitor. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If symptoms occur get medical attention.

**Skin Contact:**

Wash skin with plenty of soap and water. If irritation or other symptoms occur get medical attention. Wash contaminated clothing and clean shoes before reuse. Any injection injury from high pressure equipment should be evaluated immediately by a physician as potentially serious (See NOTES TO PHYSICIAN).

**Eye Contact:**

Immediately flush eyes with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Gently remove contacts while flushing. Get medical attention if irritation persists.

**Ingestion:**

Rinse mouth out with water. If spontaneous vomiting occurs, keep head below hips, or if patient is lying down, turn body and head to side to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person. Keep affected person warm and at rest. If symptoms develop, seek medical attention.

**Most important signs and symptoms, both short-term and delayed with overexposure**

**Adverse Effects:**

Preexisting skin conditions and respiratory disorders may be aggravated by exposure to components of this product.

**Indication of any immediate medical attention and special treatment needed**

**NOTES TO PHYSICIAN:**

SKIN: Leaks or accidents involving high-pressure equipment may inject a stream of material through the skin and initially produce an injury that may not appear serious. Only a small puncture wound may appear on the skin surface but, without proper treatment and depending on the nature, original pressure, volume, and location of the injected material, can compromise blood supply to an affected body part. Prompt surgical debridement of the wound may be necessary to prevent irreversible loss of function and/or the affected body part. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES.

### 5. FIRE-FIGHTING MEASURES



**Suitable extinguishing media**

For small fires, Class B fire extinguishing media such as CO2, dry chemical, foam (AFFF/ATC) or water spray can be used. For large fires, water spray, fog or foam (AFFF/ATC) can be used. Firefighting should be attempted only by those who are adequately trained and equipped with proper protective equipment.

**Unsuitable extinguishing media**

Do not use a solid water stream as it may scatter and spread fire.

**Specific hazards arising from the chemical**

The product is not combustible per the OSHA Hazard Communication Standard, but will ignite and burn at temperatures exceeding the flash point.

**Hazardous combustion products**

Smoke, carbon monoxide, and other products of incomplete combustion.

**Explosion data**

Sensitivity to Mechanical Impact No.  
Sensitivity to Static Discharge No.

**Special protective equipment and precautions for firefighters**

Avoid using straight water streams. Water spray and foam (AFFF/ATC) must be applied carefully to avoid frothing and from as far a distance as possible. Avoid excessive water spray application. Use water spray to cool exposed surfaces from as far a distance as possible. Keep run-off water out of sewers and water sources.

**NFPA:** Health 1 Flammability 1 Instability 0 Special Hazards -

**6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Keep public away. Isolate and evacuate area. Shut off source if safe to do so.

**Protective Equipment:** Use personal protection measures as recommended in Section 8.

**Emergency Procedures:** Advise authorities and National Response Center (800-424-8802) if the product has entered a water course or sewer. Notify local health and pollution control agencies, if appropriate.

**Environmental precautions:** Avoid release to the environment. Avoid subsoil penetration.

**Methods and materials for containment:** Prevent further leakage or spillage if safe to do so.

**Methods and materials for cleaning up:** Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids. Recover and return free product to proper containers.

**7. HANDLING AND STORAGE**

**Safe Handling Precautions:** Avoid contact with skin, eyes and clothing. Do not swallow. Avoid breathing vapors or mists. Use good personal hygiene practices. Wash thoroughly after handling. Use personal protection measures as recommended in Section 8. Do not cut, drill, grind or weld on empty containers since explosive residues may remain. Refer to applicable EPA, OSHA, NFPA and consistent state and local requirements.

High-pressure injection of any material through the skin is a serious medical emergency even though the small entrance wound at the injection site may not initially appear serious. These injection injuries can occur from high-pressure equipment such as paint spray or grease or guns, fuel injectors, or pinhole leaks in hoses or hydraulic lines and should all be considered serious. High pressure injection injuries may be SERIOUS SURGICAL EMERGENCIES (See First Aid Section 4).

**Storage Conditions:** Store in properly closed containers that are appropriately labeled and in a cool, well-ventilated area. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store away from incompatible materials.

**Incompatible materials** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	ACGIH TLV	OSHA PELs:	OSHA - Vacated PELs	NIOSH IDLH
Distillates (petroleum), hydrotreated light 64742-47-8	200 mg/m <sup>3</sup> TWA (total hydrocarbon vapor) Skin - potential significant contribution to overall exposure by the cutaneous route	-	-	-

**Notes:** The manufacturer has voluntarily elected to provide exposure limits contained in OSHA's 1989 air contaminants standard in its SDSs, even though certain of those exposure limits were vacated in 1992.

**Engineering measures:** Local or general exhaust required when using at elevated temperatures that generate vapors or mists.

**Personal protective equipment**

**Eye protection:** Use goggles or face-shield if the potential for splashing exists.

**Skin and body protection:** Wear neoprene, nitrile or PVA gloves to prevent skin contact. Glove suitability is based on workplace conditions and usage. Contact the glove manufacturer for specific advice on glove selection and breakthrough times. Wear appropriate protective clothing.

**Respiratory protection:** Use an approved organic vapor chemical cartridge or supplied air respirators when material produces vapors that exceed permissible exposure limits or excessive vapors are generated. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 29 CFR 1910.134. Self-contained breathing apparatus should be used for fire fighting.

**Hygiene measures:** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid
<b>Appearance</b>	Red Liquid
<b>Color</b>	Red
<b>Odor</b>	Petroleum
<b>Odor Threshold</b>	No available data.

<b><u>Property</u></b>	<b><u>Values (Method)</u></b>
<b>Melting Point / Freezing Point</b>	No available data.
<b>Initial Boiling Point / Boiling Range</b>	No available data.
<b>Flash Point</b>	> 180 °C / > 356 °F (Cleveland Open-Cup)
<b>Evaporation Rate</b>	No available data.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Flammability Limit in Air (%)</b>	
<b>Upper Flammability Limit:</b>	No available data.
<b>Lower Flammability Limit:</b>	No available data.

<b>Vapor Pressure</b>	No available data.
<b>Vapor Density</b>	No available data.
<b>Specific Gravity / Relative Density</b>	0.849-0.859
<b>Water Solubility</b>	No available data.
<b>Solubility in other solvents</b>	No available data.
<b>Partition Coefficient</b>	No available data.
<b>Decomposition temperature:</b>	No available data.
<b>pH:</b>	No available data.
<b>Autoignition Temperature</b>	No available data.
<b>Kinematic Viscosity</b>	≥ 29 mm <sup>2</sup> /s @ 40°C / 104°F (ASTM D445)
<b>Dynamic Viscosity</b>	No available data.
<b>Explosive Properties</b>	No available data.
<b>Softening Point</b>	No available data.
<b>VOC Content (%)</b>	No available data.
<b>Density</b>	No available data.
<b>Bulk Density</b>	Not applicable.

## 10. STABILITY AND REACTIVITY

<b><u>Reactivity</u></b>	The product is non-reactive under normal conditions.
<b><u>Chemical stability</u></b>	Stable under recommended storage conditions.
<b><u>Possibility of hazardous reactions</u></b>	None under normal processing.
<b><u>Hazardous polymerization</u></b>	Will not occur.
<b><u>Conditions to avoid</u></b>	Sources of heat or ignition.
<b><u>Incompatible materials</u></b>	Strong oxidizing agents.
<b><u>Hazardous decomposition products</u></b>	None known under normal conditions of use.

## 11. TOXICOLOGICAL INFORMATION

**Potential short-term adverse effects from overexposures**

<b>Inhalation</b>	Overheating may produce vapors which may cause respiratory irritation, dizziness and nausea.
<b>Eye contact</b>	Exposure to vapor or contact with liquid may cause mild eye irritation.
<b>Skin contact</b>	Prolonged or repeated exposure may cause dermatitis, folliculitis or oil acne.
<b>Ingestion</b>	May cause irritation of the mouth, throat and gastrointestinal tract.

**Acute Toxicological data**

Name	Oral LD50	Dermal LD50	Inhalation LC50
Distillates (petroleum), hydrotreated light 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

This product is considered to have a low order of acute and chronic oral and dermal toxicity.

**Adverse effects related to the physical, chemical and toxicological characteristics**

<b>Signs &amp; Symptoms</b>	Repeated or prolonged skin contact may cause drying, reddening, itching and cracking.
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**Sensitization** Not expected to be a skin or respiratory sensitizer.

**Mutagenic effects** None known.

**Carcinogenicity** Cancer designations are listed in the table below.

Name	ACGIH (Class)	IARC (Class)	NTP	OSHA
Distillates (petroleum), hydrotreated light 64742-47-8	Not Listed	Not Listed	Not Listed	Not Listed

**Reproductive toxicity** None known.

**Specific Target Organ Toxicity (STOT) - single exposure** Not classified.

**Specific Target Organ Toxicity (STOT) - repeated exposure** Not classified.

**Aspiration hazard** Not classified.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** No information available.

Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Distillates (petroleum), hydrotreated light 64742-47-8	-	96-hr LC50 = 2.2 mg/l Bluegill	-	-

**Persistence and degradability** No information available.

**Bioaccumulation** No information available.

**Mobility in soil** No information available.

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Description of Waste Residues**  
No information available.

**Safe Handling of Wastes**  
Handle in accordance with applicable local, state, and federal regulations. Use personal protection measures as required.

**Disposal of Wastes / Methods of Disposal**  
The user is responsible for determining if any discarded material is a hazardous waste (40 CFR 262.11). Dispose of in accordance with federal, state and local regulations.

**Methods of Contaminated Packaging Disposal**  
Empty containers should be completely drained and then discarded or recycled, if possible. Do not cut, drill, grind or weld on empty containers since explosive residues may be present. Dispose of in accordance with federal, state and local regulations.

## 14. TRANSPORT INFORMATION

**DOT (49 CFR 172.101):**

UN Proper shipping name: Not Regulated  
 UN/Identification No: Not applicable  
 Transport Hazard Class(es): Not applicable  
 Packing group: Not applicable

**TDG (Canada):**

UN Proper shipping name: Not Regulated  
 UN/Identification No: Not applicable  
 Transport Hazard Class(es): Not applicable  
 Packing group: Not applicable

**15. REGULATORY INFORMATION**

**US Federal Regulatory Information:**

US TSCA Chemical Inventory Section 8(b): This product and/or its components are listed on the TSCA Chemical Inventory.

**EPA Superfund Amendment & Reauthorization Act (SARA):**

**SARA Section 302:** This product may contain component(s) that have been listed on EPA's Extremely Hazardous Substance (EHS) List:

Name	CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs
Distillates (petroleum), hydrotreated light	NA

**SARA Section 304:** This product may contain component(s) identified either as an EHS or a CERCLA Hazardous substance which in case of a spill or release may be subject to SARA reporting requirements:

Name	CERCLA/SARA - Hazardous Substances and their Reportable Quantities
Distillates (petroleum), hydrotreated light	NA

**SARA:** The following EPA hazard categories apply to this product:  
 None

**SARA Section 313:** This product may contain component(s), which if in exceedance of the de minimus threshold, may be subject to the reporting requirements of SARA Title III Section 313 Toxic Release Reporting (Form R).

Name	CERCLA/SARA 313 Emission reporting:
Distillates (petroleum), hydrotreated light	None

**State and Community Right-To-Know Regulations:**

The following component(s) of this material are identified on the regulatory lists below:

Distillates (petroleum), hydrotreated light

Louisiana Right-To-Know:	Not Listed.
California Proposition 65:	Not Listed.
New Jersey Right-To-Know:	Not Listed.
Pennsylvania Right-To-Know:	Not Listed.
Massachusetts Right-To Know:	Not Listed.
Florida Substance List:	Not Listed.
Rhode Island Right-To-Know:	Not Listed.
Michigan Critical Materials Register List:	Not Listed.
Massachusetts Extraordinarily Hazardous Substances:	Not Listed.
California - Regulated Carcinogens:	Not Listed.
Pennsylvania RTK - Special Hazardous Substances:	Not Listed.

New Jersey - Special Hazardous Substances:	Not Listed.
New Jersey - Environmental Hazardous Substances List:	Not Listed.
Illinois - Toxic Air Contaminants	Not Listed.
New York - Reporting of Releases Part 597 - List of Hazardous Substances:	Not Listed.

**Canada DSL/NDSL Inventory:** This product and/or its components are listed either on the Domestic Substances List (DSL) or are exempt.

**Canadian Regulatory Information:** "This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the (M)SDS contains all the information required by the Controlled Products Regulations."

**NOTE:** Uncontrolled product according to WHMIS classification criteria.

## 16. OTHER INFORMATION

**Prepared By** Toxicology and Product Safety  
**Revision Date:** 05/22/2015

**Revision Note:**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is intended as guidance for safe handling, use, processing, storage, transportation, accidental release, clean-up and disposal and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

# SAFETY DATA SHEET

According to OSHA Hazard Communication Standard, 29 CFR  
1910.1200

Version 13.2

Revision Date: 08/27/2015

Print Date: 08/28/2015

## SECTION 1. IDENTIFICATION

Product name : Shell Spirax HD 80W-90

Product code : 001B1878

### Manufacturer or supplier's details

Manufacturer/Supplier : **Shell Oil Products US**  
P.O. Box 4427  
Houston TX 77210-4427  
USA

SDS Request : (+1) 877-276-7285  
Customer Service :

### Emergency telephone number

Spill Information : 877-504-9351  
Health Information : 877-242-7400

### Recommended use of the chemical and restrictions on use

Recommended use : Transmission oil.

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Not a hazardous substance or mixture.

### GHS Label element

Hazard pictograms : No Hazard Symbol required

Signal word : No signal word

Hazard statements : **PHYSICAL HAZARDS:**  
Not classified as a physical hazard under GHS criteria.  
**HEALTH HAZARDS:**  
Not classified as a health hazard under GHS criteria.  
**ENVIRONMENTAL HAZARDS:**  
Not classified as an environmental hazard under GHS criteria.

Precautionary statements : **Prevention:**  
No precautionary phrases.  
**Response:**  
No precautionary phrases.  
**Storage:**  
No precautionary phrases.  
**Disposal:**  
No precautionary phrases.

### Other hazards which do not result in classification

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

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Used oil may contain harmful impurities.  
Not classified as flammable but will burn.

The classification of this material is based on OSHA HCS 2012 criteria.

Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Highly refined mineral oils and additives.  
The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

### Hazardous components

Chemical Name	Synonyms	CAS-No.	Concentration (%)
Dialkylpolysulphide		68937-96-2	1 - 3
Amine phosphate		91745-46-9	1 - 2.4
Alkenyl imidazoline		27136-73-8	0.1 - 0.9

## SECTION 4. FIRST-AID MEASURES

General advice : Not expected to be a health hazard when used under normal conditions.

If inhaled : No treatment necessary under normal conditions of use.  
If symptoms persist, obtain medical advice.

In case of skin contact : Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.  
If persistent irritation occurs, obtain medical attention.

In case of eye contact : Flush eye with copious quantities of water.  
If persistent irritation occurs, obtain medical attention.

If swallowed : In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.

Most important symptoms and effects, both acute and delayed : Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas.  
Ingestion may result in nausea, vomiting and/or diarrhoea.

Protection of first-aiders : When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

Immediate medical attention, special treatment : Treat symptomatically.

## SECTION 5. FIRE-FIGHTING MEASURES



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- Suitable extinguishing media : Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
- Unsuitable extinguishing media : Do not use water in a jet.
- Specific hazards during fire-fighting : Hazardous combustion products may include:  
A complex mixture of airborne solid and liquid particulates and gases (smoke).  
Carbon monoxide may be evolved if incomplete combustion occurs.  
Unidentified organic and inorganic compounds.
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Special protective equipment for firefighters : Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Avoid contact with skin and eyes.
- Environmental precautions : Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.  
  
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material.  
Reclaim liquid directly or in an absorbent.  
Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
- Additional advice : For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet.  
For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

## SECTION 7. HANDLING AND STORAGE

- Technical measures : Use local exhaust ventilation if there is risk of inhalation of

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vapours, mists or aerosols.

Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.

Precautions for safe handling : Avoid prolonged or repeated contact with skin.  
Avoid inhaling vapour and/or mists.  
When handling product in drums, safety footwear should be worn and proper handling equipment should be used.  
Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.

Avoidance of contact : Strong oxidising agents.

Product Transfer : This material has the potential to be a static accumulator.  
Proper grounding and bonding procedures should be used during all bulk transfer operations.

## Storage

Other data : Keep container tightly closed and in a cool, well-ventilated place.  
Use properly labeled and closable containers.

Store at ambient temperature.

Packaging material : Suitable material: For containers or container linings, use mild steel or high density polyethylene.  
Unsuitable material: PVC.

Container Advice : Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.

## SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Oil mist, mineral	Not Assigned	TWA ((inhalable fraction))	5 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values
		(Mist)	5 mg/m <sup>3</sup>	OSHA_TRANS

### Biological occupational exposure limits

No biological limit allocated.

### Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

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Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods  
<http://www.cdc.gov/niosh/>

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods  
<http://www.osha.gov/>

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances  
<http://www.hse.gov.uk/>

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany  
<http://www.dguv.de/inhalt/index.jsp>

L'Institut National de Recherche et de Sécurité, (INRS), France <http://www.inrs.fr/accueil>

**Engineering measures** : The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include:  
Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

#### General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.

Practice good housekeeping.

#### Personal protective equipment

**Respiratory protection** : No respiratory protection is ordinarily required under normal conditions of use.  
In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material.  
If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.  
Check with respiratory protective equipment suppliers.  
Where air-filtering respirators are suitable, select an appropriate combination of mask and filter.  
Select a filter suitable for the combination of organic gases and vapours [Type A/Type P boiling point >65°C (149°F)].

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Hand protection  
Remarks

: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Eye protection

: If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

Skin and body protection

: Skin protection is not ordinarily required beyond standard work clothes.  
It is good practice to wear chemical resistant gloves.

Protective measures

: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

## Environmental exposure controls

General advice

: Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water.  
Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: Liquid at room temperature.

Colour

: amber

Odour

: Slight hydrocarbon

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Odour Threshold	: Data not available
pH	: Not applicable
pour point	: -27 °C / -17 °F Method: ASTM D97
Initial boiling point and boiling range	: > 280 °C / 536 °F Estimated value(s)
Flash point	: 218 °C / 424 °F Method: ASTM D92
Evaporation rate	: Data not available
Flammability (solid, gas)	: Data not available
Upper explosion limit	: Typical 10 %(V)
Lower explosion limit	: Typical 1 %(V)
Vapour pressure	: < 0.5 Pa (20 °C / 68 °F) estimated value(s)
Relative vapour density	: > 1 estimated value(s)
Relative density	: 0.8872 (15 °C / 59 °F)
Density	: 887.2 kg/m <sup>3</sup> (15.0 °C / 59.0 °F) Method: ASTM D1298
Solubility(ies)	
Water solubility	: negligible
Solubility in other solvents	: Data not available
Partition coefficient: n-octanol/water	: Pow: > 6 (based on information on similar products)
Auto-ignition temperature	: > 320 °C / 608 °F
Viscosity	
Viscosity, dynamic	: Data not available
Viscosity, kinematic	: 139 mm <sup>2</sup> /s (40.0 °C / 104.0 °F) Method: Unspecified
Conductivity	: This material is not expected to be a static accumulator.
Decomposition temperature	: Data not available

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## SECTION 10. STABILITY AND REACTIVITY

- Reactivity : The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
- Chemical stability : Stable.
- Possibility of hazardous reactions : Reacts with strong oxidising agents.
- Conditions to avoid : Extremes of temperature and direct sunlight.
- Incompatible materials : Strong oxidising agents.
- Hazardous decomposition products : Hazardous decomposition products are not expected to form during normal storage.

## SECTION 11. TOXICOLOGICAL INFORMATION

- Basis for assessment : Information given is based on data on the components and the toxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

### Information on likely routes of exposure

Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

### Acute toxicity

#### Product:

- Acute oral toxicity : LD50 (rat): > 5,000 mg/kg  
Remarks: Expected to be of low toxicity:
- Acute inhalation toxicity : Remarks: Not considered to be an inhalation hazard under normal conditions of use.
- Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg  
Remarks: Expected to be of low toxicity:

### Skin corrosion/irritation

#### Product:

Remarks: Expected to be slightly irritating., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

### Serious eye damage/eye irritation

#### Product:

Remarks: Expected to be slightly irritating.

#### Components:

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## **Amine phosphate:**

Remarks: Based on available data, the classification criteria are not met.

## **Respiratory or skin sensitisation**

### **Product:**

Remarks: Not expected to be a skin sensitiser.

### **Components:**

#### **Dialkylpolysulphide:**

Remarks: Experimental data has shown that the concentration of potentially sensitising components present in this product does not induce skin sensitisation. May cause an allergic skin reaction in sensitive individuals.

#### **Amine phosphate:**

Remarks: Experimental data has shown that the concentration of potentially sensitising components present in this product does not induce skin sensitisation. May cause an allergic skin reaction in sensitive individuals.

## **Germ cell mutagenicity**

### **Product:**

: Remarks: Not considered a mutagenic hazard.

## **Carcinogenicity**

### **Product:**

Remarks: Not expected to be carcinogenic.

Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

<b>IARC</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
<b>NTP</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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## Reproductive toxicity

### Product:

: Remarks: Not expected to impair fertility., Not expected to be a developmental toxicant.

## STOT - single exposure

### Product:

Remarks: Not expected to be a hazard.

## STOT - repeated exposure

### Product:

Remarks: Not expected to be a hazard.

## Aspiration toxicity

### Product:

Not considered an aspiration hazard.

## Further information

### Product:

Remarks: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal., ALL used oil should be handled with caution and skin contact avoided as far as possible.

Remarks: Slightly irritating to respiratory system.

## SECTION 12. ECOLOGICAL INFORMATION

Basis for assessment : Ecotoxicological data have not been determined specifically for this product.  
Information given is based on a knowledge of the components and the ecotoxicology of similar products.  
Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).(LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract).

## Ecotoxicity

### Product:

Toxicity to fish (Acute toxicity) : Remarks: Expected to be practically non toxic:  
LL/EL/IL50 > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates (Acute toxicity) : Remarks: Expected to be practically non toxic:  
LL/EL/IL50 > 100 mg/l



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Toxicity to algae (Acute toxicity) : Remarks: Expected to be practically non toxic:  
LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic toxicity) : Remarks: Data not available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: Data not available

Toxicity to bacteria (Acute toxicity) : Remarks: Data not available

## **Components:**

### **Alkenyl imidazoline:**

M-Factor (Acute aquatic toxicity) : 1

## **Persistence and degradability**

### **Product:**

Biodegradability : Remarks: Expected to be not readily biodegradable.  
Major constituents are expected to be inherently biodegradable, but contains components that may persist in the environment.

## **Bioaccumulative potential**

### **Product:**

Bioaccumulation : Remarks: Contains components with the potential to bioaccumulate.

## **Mobility in soil**

### **Product:**

Mobility : Remarks: Liquid under most environmental conditions.  
If it enters soil, it will adsorb to soil particles and will not be mobile.

Remarks: Floats on water.

## **Other adverse effects**

no data available

### **Product:**

Additional ecological information : Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities.  
Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

Poorly soluble mixture.

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May cause physical fouling of aquatic organisms.

Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

## SECTION 13. DISPOSAL CONSIDERATIONS

### Disposal methods

Waste from residues : Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.

Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

Contaminated packaging : Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

## SECTION 14. TRANSPORT INFORMATION

### National Regulations

#### US Department of Transportation Classification (49 CFR Parts 171-180)

Not regulated as a dangerous good

### International Regulation

#### IATA-DGR

Not regulated as a dangerous good

#### IMDG-Code

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollution category : Not applicable  
Ship type : Not applicable  
Product name : Not applicable  
Special precautions : Not applicable

### Special precautions for user

Remarks : Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

Additional Information : MARPOL Annex 1 rules apply for bulk shipments by sea.

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## SECTION 15. REGULATORY INFORMATION

**OSHA Hazards** : No OSHA Hazards

### **EPCRA - Emergency Planning and Community Right-to-Know Act**

#### **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ., Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA.

#### **SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 311/312 Hazards** : No SARA Hazards

**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **Clean Water Act**

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

#### **Pennsylvania Right To Know**

Residual Oils (Petroleum) Solvent Dewaxed	64742-62-7
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0
lubricating oils (petroleum), C15-30, hydro-treated neutral oil-based	72623-86-0
White mineral oil (petroleum)	8042-47-5

**California Prop 65** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

#### **The components of this product are reported in the following inventories:**

EINECS : All components listed or polymer exempt.

TSCA : All components listed.

DSL : All components listed.

## SECTION 16. OTHER INFORMATION

#### **Further information**

NFPA Rating (Health, Fire, Reactivity) 0, 1, 0

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A vertical bar (|) in the left margin indicates an amendment from the previous version.

Abbreviations and Acronyms : The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.

ACGIH = American Conference of Governmental Industrial Hygienists  
ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road  
AICS = Australian Inventory of Chemical Substances  
ASTM = American Society for Testing and Materials  
BEL = Biological exposure limits  
BTEX = Benzene, Toluene, Ethylbenzene, Xylenes  
CAS = Chemical Abstracts Service  
CEFIC = European Chemical Industry Council  
CLP = Classification Packaging and Labelling  
COC = Cleveland Open-Cup  
DIN = Deutsches Institut für Normung  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
DSL = Canada Domestic Substance List  
EC = European Commission  
EC50 = Effective Concentration fifty  
ECETOC = European Center on Ecotoxicology and Toxicology Of Chemicals  
ECHA = European Chemicals Agency  
EINECS = The European Inventory of Existing Commercial Chemical Substances  
EL50 = Effective Loading fifty  
ENCS = Japanese Existing and New Chemical Substances Inventory  
EWC = European Waste Code  
GHS = Globally Harmonised System of Classification and Labelling of Chemicals  
IARC = International Agency for Research on Cancer  
IATA = International Air Transport Association  
IC50 = Inhibitory Concentration fifty  
IL50 = Inhibitory Level fifty  
IMDG = International Maritime Dangerous Goods  
INV = Chinese Chemicals Inventory  
IP346 = Institute of Petroleum test method N° 346 for the determination of polycyclic aromatics DMSO-extractables  
KECI = Korea Existing Chemicals Inventory  
LC50 = Lethal Concentration fifty  
LD50 = Lethal Dose fifty per cent.  
LL/EL/IL = Lethal Loading/Effective Loading/Inhibitory loading  
LL50 = Lethal Loading fifty  
MARPOL = International Convention for the Prevention of Pollution From Ships  
NOEC/NOEL = No Observed Effect Concentration / No Observed Effect Level  
OE\_HP V = Occupational Exposure - High Production Volume  
PBT = Persistent, Bioaccumulative and Toxic  
PICCS = Philippine Inventory of Chemicals and Chemical Substances  
PNEC = Predicted No Effect Concentration

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REACH = Registration Evaluation And Authorisation Of  
Chemicals  
RID = Regulations Relating to International Carriage of Dan-  
gerous Goods by Rail  
SKIN\_DES = Skin Designation  
STEL = Short term exposure limit  
TRA = Targeted Risk Assessment  
TSCA = US Toxic Substances Control Act  
TWA = Time-Weighted Average  
vPvB = very Persistent and very Bioaccumulative

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.



## Safety Data Sheet

### Section 1: Identification

#### Product Identifier

Antifreeze

#### Product Name

Trade Name: SPLASH RV & Marine Antifreeze -50°F

PN (Part number): 619527

#### Relevant identified uses of the substance or mixture and uses advised against

- Material for industrial applications
- Industrial and professional use
- Consumer end use

#### Details of the supplier of the safety data sheet

##### Manufacturer

SPLASH Products  
51 E. Maryland Ave.  
St. Paul, MN 55117  
Phone: (651) 489-8211

##### Emergency telephone number

1-800-535-5053

### Section 2: Hazard(s) Identification

#### OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### Classification of the substance or mixture

Flammable Liquid, Category 3

Specific Target Organ Toxicity (Repeated Exposure), Category 2

Specific Target Organ Toxicity (Single Exposure), Category 3

#### GHS label elements

##### Hazard pictograms



##### Signal word-Warning

Ethanol

##### Hazard statements

Flammable liquid and vapor

May cause damage to liver, kidneys and nervous system by repeated or prolonged inhalation or skin contact.

May cause drowsiness or dizziness.

**Precautionary statements**

**Prevention**

Do not breathe mist.

Wear protective gloves/protective clothing/eye protection/face protection.

Take off contaminated clothing and wash before use

Store away from heat and ignition sources

Keep away from oxidizing materials and strong acids

**Response**

IF SWALLOWED: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

IF ON SKIN (or hair): Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.

IF IN EYES: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Cold water may be used. Get medical attention immediately.

IF EXPOSED or CONCERNED:

Immediately call a POISON CENTER or a doctor/physician.

**Storage**

Store in a well-ventilated place.

**Disposal**

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**

Product is stable.

**Section 3: Composition/Information on Ingredients**

Substance/mixture:Mixture

Chemical name: Ethanol

Other means of identification: No

CAS number/other identifiers

Ingredient name	%	CAS number
Ethanol	13-15	64-17-5

**Section 4: First Aid Measurements**

Description of necessary first aid measures

Eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 30 minutes. Cold water may be used. Get medical attention immediately.

Inhalation: Bring accident victims out into the fresh air. Call a physician immediately in severe cases or if recovery is not rapid.

Skin contact: After contact with skin, wash immediately with plenty of water. Remove contaminated clothing and wash before reuse.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

**Potential acute health effects**

**Eye contact**

Can cause irritation to eyes and mucous membranes.

**Inhalation**

Sore throat, shortness of breath, coughing and congestion.

**Skin contact**

Irritation, itching, dermatitis.

**Ingestion**

Irritation to mucous membranes.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician**

Exposure may aggravate acute or chronic asthma, emphysema and bronchitis.

**Specific treatments**

N/A

**Protection of first-aiders**

N/A

**See toxicological information (Section 11)**

Section 5: Fire Fighting Measures

**Extinguishing media**

**Suitable extinguishing media**

SMALL FIRE: Use DRY chemical powder, CO<sub>2</sub> or appropriate foam.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Unsuitable extinguishing media**

None known

**Specific hazards arising from the chemical**

Vapors may travel back to ignition source. Closed containers exposed to heat may explode.

**Hazardous thermal decomposition products/Products of combustion**

Products of combustion are carbon oxides (CO, CO<sub>2</sub>).

**Special protective actions for fire fighters**

Do not release runoff from fire control methods to sewers or waterways.

**Special protective equipment for fire-fighters**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

Section 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

**Environmental precautions**

**Methods and materials for containment and cleaning up:**



Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including: the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits.

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Shut off ignition sources; including electrical equipment and flames. Do not allow smoking in the area.

Section 7: Handling and Storage

**Precautions for safe handling**

**Protective measures, advice on general occupational hygiene and conditions for safe storage, including any incompatibilities:**

Keep away from heat, sparks, open flames, hot surfaces.

– No smoking.

Keep container tightly closed. Ground or bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting, etc. equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust, fumes, gas, mist, vapors or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, clothing, and eye and face protection. Keep container tightly closed in a cool, well-ventilated place. Keep away from oxidizing materials and strong acids.

Store in a well-ventilated area. Keep cool. Keep in an area suitable for flammable liquids.

Section 8: Exposure Controls/Personal Protection

**Control parameters**

**Occupational exposure limits**

Ingredient name	Exposure limits			
	ACGIH		OSHA	
	(TWA)	(STEL)	(TWA)	(STEL)
Ethanol	1000 ppm; 1880 mg/m <sup>3</sup>	1000 ppm	1000 ppm; 1900 mg/m <sup>3</sup>	1000 ppm; 1900 mg/m <sup>3</sup>

**Appropriate engineering controls and Environmental exposure controls**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

**Individual protection measures**

**Hygiene measures**

No special protective clothing is normally required. Select protective clothing depending on industrial operations. Use mechanical ventilation equipment that is explosion-proof.

**Eye/face protection:** Use chemical safety goggles.

**Skin protection**

**Hand protection and Body protection:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Other skin protection**

Wash hands and other exposed areas with mild soap and water before eating or drinking.

**Respiratory protection:** No respiratory protection required under normal circumstances. Approved organic vapor chemical cartridge or supplied air respirators should be worn when significant vapors are generated. Observe respirator assigned protection factors (APFs) criteria cited in federal OSHA 1910.134. Self-contained breathing apparatus should be used for firefighting.

**Respirator Type(s) (NIOSH Approved):** If the exposure limit is exceeded and engineering controls are not feasible, a half face piece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure

limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full face piece particulate respirator (NIOSH type N100 filter) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, Glycerin, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full face piece positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in Oxygen-deficient atmospheres.

#### Section 9: Physical and Chemical Properties

##### **Appearance**

**Physical state:** Pink liquid

**Odor:** Alcohol

**Odor threshold:** No Data Available

**pH:** 8.2

**Specific Gravity:** 1.01

**Melting point:** -13°C

**Boiling point:** No Data Available

**Flash point:** 51°C

**Evaporation rate (BuAc=1):** No Data Available

**Flammability (solid, gas):** Yes

**Lower and upper explosive (flammable) limits:** LEL 3.3%, UEL 19% (Ethanol)

**Vapor pressure:** No Data Available

**Vapor density (Air=1):** No Data Available

**Solubility:** Soluble in water

**Partition coefficient: n-octanol/water:** Not Established

**Auto-ignition temperature:** Not Applicable

**Decomposition temperature:** Not Established

**Viscosity:** No Data Available

**VOC%:** 15

#### Section 10: Stability and Reactivity

##### **Reactivity**

Stable under recommended storage conditions.

##### **Chemical stability**

Stable under recommended storage conditions.

##### **Possibility of hazardous reactions**

Under normal conditions of storage and use, hazardous reactions will not occur.

##### **Conditions to avoid**

Temperatures above the flash point and avoid excessive heat, open flame or other sources of ignition.

##### **Incompatible materials**

Can react with strong oxidizing agents, peroxides, alkaline products and strong acids. Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

##### **Hazardous decomposition products**

Ignition and burning can release carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

#### Section 11: Toxicological Information

##### **Information on toxicological effects**

### Acute toxicity

Product/ingredient name	Test	Results
Ethanol	Acute toxicity, oral (male rat)	LD50 = 7,000 mg/kg
	Acute toxicity, dermal	LD50 = 20,000 mg/kg
	Acute toxicity, inhalation (rat)	LC50 = 8,000 mg/L 4.00 Hours

#### Summary Comments:

### Sensitization

Product/ingredient name	Test	Results	Basis
Ethanol		No evidence of sensitization effect	

#### Summary Comments:

### Carcinogenicity

Product/ingredient name	Test	Results	Basis
Ethanol		No known carcinogenic effects	

#### Summary Comments:

### Specific target organ toxicity (single exposure)

Product/ingredient name	Test	Results	Basis
Ethanol		No information available	

#### Summary Comments:

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Test	Results	Basis
Ethanol		No information available	

#### Summary Comments:

### Aspiration hazard

Product/ingredient name	Test	Results	Basis
Ethanol		No information available	

#### Summary Comments:

### Information on the likely routes of exposure

Inhalation may blur vision. Ingesting may irritate the gastrointestinal tract.

### Potential acute health effects

**Eye contact:** Irritating to the eyes.

**Inhalation:** Acute exposure of humans to ethanol by inhalation or ingestion may result in visual disturbances, such as blurred or dimness of vision, leading to blindness. Neurological damage, specifically permanent motor dysfunction, may also result.

**Skin contact:** Contact of skin with ethanol can produce mild dermatitis in humans.

**Ingestion:** Tests involving acute exposure of rats, mice, and rabbits have demonstrated ethanol to have low acute toxicity from oral exposure. May cause nausea, vomiting, dizziness and depression of CNS.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact:** Eye irritation.

**Inhalation:** Blurred vision.

**Skin contact:** Skin irritation.

**Ingestion:** May irritate the gastrointestinal tract, cause nausea, and vomiting.

### Potential chronic health effects (Ethanol)

**Carcinogenicity:** Not Classifiable as a Human Carcinogen.

**Mutagenicity:** DNA Inhibition: Human, Lymphocyte = 220 mmol/L.; Cytogenetic Analysis: Human, Lymphocyte = 1160 gm/L.; Cytogenetic Analysis: Human, Fibroblast = 12000 ppm. Cytogenetic Analysis: Human, Leukocyte = 1 pph/72H.

**Teratogenicity:** Oral, Human - woman: TDLo = 41 gm/kg (female 41 week(s) after conception) Effects on Newborn -Apgar score (human only) and Effects on Newborn - other neonatal measures or effects and Effects on Newborn – drug dependence.

**Developmental effects:** Ethanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Prenatal exposure to ethanol is associated with a distinct pattern of congenital malformations that have collectively been termed the "fetal alcohol syndrome".

**Fertility effects:** No data available.

### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

Section 12: Ecological Information

#### **Toxicity**

##### **Acute Fish toxicity: (Ethanol)**

LC50 - Oncorhynchus mykiss (rainbow trout) – 13,000 mg/L - 96 h

LC50 – Lepomis macrochirus (Bluegill) – 42,000 mg/L - 96 h

##### **Acute toxicity for daphnia: (Ethanol)**

EC50 - Daphnia magna (Water flea) – 9,300 mg/L - 48 h

##### **Acute toxicity for algae: (Ethanol)**

EC50 - Scenedesmus capricornutum (fresh water algae) - 10,000 mg/L - 96 h

##### **Acute bacterial toxicity: (Ethanol)**

No data available.

##### **Ecotoxicology Assessment: (Ethanol)**

Material is not expected to be toxic to aquatic life.

#### **Persistence and degradability**

##### **Biodegradability: (Ethanol)**

When released into the soil, this material is expected to readily biodegrade. When released into water, this material is expected to readily biodegrade. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals.

##### **Stability in water: (Ethanol)**

When released into the soil, this material is expected to quickly evaporate. When released into the soil, this material is expected to leach into groundwater.

##### **Photodegradation: (Ethanol)**

No data available

##### **Volatility (Henry's Law constant): (Ethanol)**

Partition coefficient n-octanol/water ( $\log K_{ow}$ ) = -0.31

#### **Bioaccumulative potential**

##### **Bioaccumulation: (Ethanol)**

Bioconcentration factor (BCF): 0.5

##### **Mobility in soil: (Ethanol)**

##### **Distribution among environmental compartments:**

When released into the soil, this material is expected to quickly evaporate. When released into the soil, this material is expected to leach into groundwater.

##### **Other adverse effects:**

When released into the water, this material is expected to have a half-life between 1 and 10 days. When released into the air, this material is expected to exist in the aerosol phase with a short half-life. When released into air, this material is expected to have a half-life between 10 and 30 days. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition.

Section 13: Disposal Considerations

**Disposal methods**

Dispose in accordance with applicable international, national and local laws, ordinances and statutes.

Section 14: Transport Information

**UN Number:** N/A

**DOT Proper Shipping Name:** Limited Quantity, Consumer Commodity, ORM-D

**Exemptions:** Per 49 CFR 173.150 (pg III, inner package not over 5.0 L)

**Transport hazard Class(es):** N/A

**Packing Group:** N/A

**Land Transport ADR/RID and GGVS/GGVE (Cross Border / Domestic)**

**Transport Hazard Class(es):** N/A

**Maritime Transport IMDG/GGVSea**

**Transport Hazard Class(es):** N/A

**Marine Pollutant:** No

**Air Transport ICAO-TI and IATA-DGR**

**Transport Hazard Class(es):** N/A

Section 15: Regulatory Information

Chemical Inventory Status-Part 1

Ingredient (CAS#)	TSCA	EC	Japan	Australia
Ethanol (64-17-5)	Yes	Yes	Yes	Yes

Chemical Inventory Status-Part 2

Ingredient (CAS#)	Korea	Canada	Canada	Philippines
		DSL	NDSL	
Ethanol (64-17-5)	Yes	Yes	No	Yes

Federal, State & International Regulations-Part 1

Ingredient (CAS#)	SARA 302		SARA 313	
	RQ	TPQ	List Chemical	Category
Ethanol (64-17-5)	No	No	No	No

Federal, State & International Regulations-Part 2

Ingredient (CAS#)	RCRA		TSCA
	CERCLA	261.33	8(d)
Ethanol (64-17-5)	No	No	No

Chemical Weapons Convention: No

TSCA 12b: No

CDTA: No

**SARA 311/312:**

Acute: Yes,      Chronic: Yes,      Fire: Yes,      Pressure: No,      Reactivity: No  
Mixture/Liquid

Australian Hazchem Code: 2[S]E

Poison Schedule: No information found

Section 16: Other Information
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**History**

**Date of issue: 07/16/15**

**Version: 2a**

**Revised Sections(s): Name change**

**Prepared by: Andrew Gioino, SPLASH PRODUCTS**

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Synthetic Brake & Caliper Grease

**Other means of identification**

**Product code** 05351, 05352, 05353, 05359

**Recommended use** Lubricating grease for brakes

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufactured or sold by:**

**Company name** CRC Industries, Inc.  
**Address** 885 Louis Dr.

Warminster, PA 18974 US

**Telephone**

**General Information** 215-674-4300

**Technical Assistance** 800-521-3168

**Customer Service**

800-272-4620

**24-Hour Emergency** 800-424-9300 (US)

**(CHEMTREC)** 703-527-3887 (International)

**Website** www.crcindustries.com

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**Environmental hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** The mixture does not meet the criteria for classification.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information**

Not applicable.

## 3. Composition/information on ingredients

**Mixtures**

Chemical name	Common name and synonyms	CAS number	%
Synthetic oil blend		Proprietary	85 - 95
Amorphous silica		7631-86-9	1 - 5
Graphite		7782-42-5	0.5 - 5
Molybdenum disulphide		1317-33-5	0.5 - 5
Polytetrafluoroethylene		9002-84-0	0.5 - 5

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Material name: Synthetic Brake & Caliper Grease

989 Version #: 01 Issue date: 07-28-2014

SDS US

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## 4. First-aid measures

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<b>Inhalation</b>	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Rinse with water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Call a POISON CENTER or doctor/physician. Do not induce vomiting. Keep victim warm.
<b>Most important symptoms/effects, acute and delayed</b>	Direct contact with eyes may cause temporary irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

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<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemicals. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Treat as oil fire. Wear self-contained breathing apparatus and protective clothing.
<b>Fire-fighting equipment/instructions</b>	In the event of fire, cool tanks with water spray.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

## 6. Accidental release measures

---

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Remove all possible sources of ignition in the surrounding area. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	This product is miscible in water. Stop the flow of material, if this is without risk. Following product recovery, flush area with water. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS. Sweep up and shovel into suitable containers for disposal. Residual liquid can be absorbed with inert material.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

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<b>Precautions for safe handling</b>	Avoid breathing vapor. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Provide adequate ventilation. Observe good industrial hygiene practices. For product usage instructions, please see the product label.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store at ambient temperature and atmospheric pressure. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

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### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Graphite (CAS 7782-42-5)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.
Molybdenum disulphide (CAS 1317-33-5)	PEL	15 mg/m <sup>3</sup>	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
Amorphous silica (CAS 7631-86-9)	TWA	0.8 mg/m <sup>3</sup>
		20 mppcf



**US. OSHA Table Z-3 (29 CFR 1910.1000)**

Components	Type	Value
Graphite (CAS 7782-42-5)	TWA	15 mppcf

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Graphite (CAS 7782-42-5)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.
Molybdenum disulphide (CAS 1317-33-5)	TWA	3 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Inhalable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Amorphous silica (CAS 7631-86-9)	TWA	6 mg/m <sup>3</sup>	
Graphite (CAS 7782-42-5)	TWA	2.5 mg/m <sup>3</sup>	Respirable.

<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	No special eye protection is normally required. Where splashing is possible, wear safety glasses, goggles or face shield.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear protective gloves such as: Neoprene. Nitrile.
<b>Other</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Air monitoring is needed to determine actual employee exposure levels.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance**

<b>Physical state</b>	Solid.
<b>Form</b>	Grease.
<b>Color</b>	Black.
<b>Odor</b>	Mild.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	> 550 °F (> 287.8 °C)
<b>Initial boiling point and boiling range</b>	842 °F (450 °C) estimated
<b>Flash point</b>	450 °F (232.2 °C) Cleveland Open Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	201002.5 hPa estimated

<b>Vapor density</b>	Not available.
<b>Relative density</b>	0.89
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	845.6 °F (452 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity (kinematic)</b>	Not available.
<b>Percent volatile</b>	Not available.

## 10. Stability and reactivity

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<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Avoid temperatures exceeding the flash point.
<b>Incompatible materials</b>	Strong oxidizing agents. Welding.
<b>Hazardous decomposition products</b>	Carbon oxides. Trace fluorine compound and silicon oxides.

## 11. Toxicological information

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### Information on likely routes of exposure

<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Inhalation</b>	Under normal conditions of intended use, this material is not expected to be an inhalation hazard. In the event it is breathed it as a mist, it may cause irritation of the respiratory track.
<b>Skin contact</b>	Prolonged skin contact may cause temporary irritation.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

<b>Acute toxicity</b>	Expected to be a low hazard for usual industrial or commercial handling by trained personnel.
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.
<b>Respiratory sensitization</b>	Not available.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

#### IARC Monographs. Overall Evaluation of Carcinogenicity

Amorphous silica (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.
Polytetrafluoroethylene (CAS 9002-84-0)	3 Not classifiable as to carcinogenicity to humans.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not likely, due to the form of the product.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.
<b>Further information</b>	This product has no known adverse effect on human health.

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Product	Species	Test Results
Synthetic Brake & Caliper Grease		
<b>Aquatic</b>		
Fish	LC50	Fish
14202.9961 mg/l, 96 hours estimated		
Components	Species	Test Results
Graphite (CAS 7782-42-5)		
<b>Aquatic</b>		
<i>Acute</i>		
Fish	LC50	Fish
> 1800 mg/l, 96 hours		

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal of waste from residues / unused products** This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Empty container can be recycled. Consult authorities before disposal. Dispose in accordance with all applicable regulations.

**Hazardous waste code** Not regulated.

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

**DOT**  
Not regulated as dangerous goods.

**IATA**  
Not regulated as dangerous goods.

**IMDG**  
Not regulated as dangerous goods.

## 15. Regulatory information

**US federal regulations** All components are on the U.S. EPA TSCA Inventory List.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not regulated.

**SARA 304 Emergency release notification**  
Not regulated.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**  
Not listed.

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**  
Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**  
Not listed.

**CERCLA Hazardous Substances: Reportable quantity**  
Not listed.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**Food and Drug Administration (FDA)** Not regulated.**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

<b>Section 311/312</b>	Immediate Hazard - No
<b>Hazard categories</b>	Delayed Hazard - No
	Fire Hazard - No
	Pressure Hazard - No
	Reactivity Hazard - No

<b>SARA 302 Extremely hazardous substance</b>	No
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**US state regulations****US. New Jersey Worker and Community Right-to-Know Act**

Graphite (CAS 7782-42-5)

**US. Massachusetts RTK - Substance List**

Amorphous silica (CAS 7631-86-9)

Graphite (CAS 7782-42-5)

Molybdenum disulphide (CAS 1317-33-5)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Amorphous silica (CAS 7631-86-9)

Graphite (CAS 7782-42-5)

Polytetrafluoroethylene (CAS 9002-84-0)

**US. Rhode Island RTK**

None.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**Volatile organic compounds (VOC) regulations****EPA**

<b>VOC content (40 CFR 51.100(s))</b>	0.6 %
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<b>Consumer products (40 CFR 59, Subpt. C)</b>	Not regulated
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**State**

<b>Consumer products</b>	Not regulated
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<b>VOC content (CA)</b>	0.6 %
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<b>VOC content (OTC)</b>	0.6 %
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**International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)  
 A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

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<b>Issue date</b>	07-28-2014
<b>Prepared by</b>	Allison Cho
<b>Version #</b>	01
<b>Further information</b>	Not available.
<b>HMIS® ratings</b>	Health: 1 Flammability: 1 Physical hazard: 0 Personal protection: B
<b>NFPA ratings</b>	Health: 1 Flammability: 1 Instability: 0

**NFPA ratings**



**Disclaimer**

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industries.

# STIHL HP (HIGH PERFORMANCE) 2-CYCLE ENGINE OIL

Packaged for Stihl Incorporated, 536 Viking Drive, Virginia Beach, VA 23452



# Safety Data Sheet

Conforms to HCS 2012 (29 CFR 1910.1200)

## Section 1. Identification

### Product identifier

<b>Product Name:</b>	STIHL HP (High Performance) 2-Cycle Engine Oil
<b>Other names:</b>	F3E
<b>Part/Product Number(s):</b>	0781-319-8008, 0781-319-8009, 0781-319-8010, <b>0781-319-8014</b> , <b>0781-319-8015</b> , <b>0781-319-8016</b> , <b>0781-319-8044</b> , <b>0781-319-8045</b> , <b>0781-319-8049</b> , 0781-319-8051, <b>7010-871-0208</b> , <b>7010-871-0177</b>
<b>Material Use:</b>	2-cycle engine fuel additive
<b>Uses advised against:</b>	Not for use in non-2-cycle engines
<b>Manufacturer:</b>	Omni Specialty Packaging, LLC 10399 Hwy 1 South Shreveport, LA 71115 1-318-524-1100
<b>Issuing date:</b>	May 21, 2015
<b>Revision date:</b>	June 2, 2015
<b>Revision number:</b>	001
<b>Company contact:</b>	OMNI EHS Department; E-Mail: <a href="mailto:sds@osp.cc">sds@osp.cc</a> ; Contact phone: 318-524-1100 (Monday-Friday, 8:00 AM – 4:00 PM, CST)
<b><u>In case of emergency:</u></b>	CHEMTREC: Within USA and Canada: 1 (800) 524-9300 (24/7) CHEMTREC Outside USA and Canada: +1 703-527-3887 (24/7)

## Section 2. Hazards Identification

**OSHA/HCS Status:** This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or Mixture:** Not classified

### GHS Label Elements

#### **Hazard pictograms:**

**Signal word:** None

**Appearance:** Blue    **Physical State:** Liquid    **Odor:** Petroleum distillates

**Hazard statement:** None

### Precautionary statements

**General:** Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention:** Not applicable

**Response:** Not applicable

**Storage:** Not applicable

**Disposal:** Not applicable

**Hazards not otherwise classified (HNOC):** Defatting to the skin.

**Other information:** Product diluted with gasoline must be handled with the same precautions used for gasoline. Before mixing, the Safety Data Sheet for gasoline should be consulted for any precautionary measures necessary.

### Section 3. Composition/Information on Ingredients

Petroleum mineral oil lubricant base stock with proprietary performance additives mixture.

**Substance/mixture:** Mixture

<u>Components Name</u>	<u>CAS number</u>	<u>Weight %*</u>
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15-C50)	Various	85 – 95
2-Cycle Engine Oil Additives Mixture	Proprietary	5 – 15

This product does not contain known hazardous materials at the  $\geq 1\%$  level or known carcinogens at the  $\geq 0.1\%$  level as defined by 29 CFR 1910.1200.

\* The exact percentage of composition has been withheld as a trade secret.

### Section 4. First Aid Measures

#### Description of necessary first aid measures

**General Advice:** No specific first aid measures are required. Get medical attention if irritation develops and persists.

**Eye contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if irritation develops and persists.

**Skin contact:** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation or allergic reaction develops and persists.

**Inhalation:** In case of inhalation of decomposition products in a fire, symptoms may be delayed. If inhaled, remove to fresh air. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.

**Ingestion:** Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician.

**Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).

#### Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

#### **Most Important**

**Symptoms and Effects:** Personnel with pre-existing skin disorders should avoid contact with this product. Under normal use conditions, no adverse effects to health are known.

**Eye contact:** Not expected to cause prolonged or significant eye irritation.

**Skin contact:** Contact with skin is not expected to cause prolonged or significant irritation. Contact with skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Inhalation:** Not expected to be harmful if inhaled. Contains petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficult breathing.

**Ingestion:** Not expected to be harmful if swallowed.

**Note to physician:** Treat symptomatically.

## Section 5. Fire-Fighting Measures

<b>Uniform Fire Code:</b>	Class IIIB
<b>Flash Point:</b>	222°C (432°F)
<b>Extinguishing Media</b>	
<b>Suitable Media:</b>	In case of fire, use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water fog, alcohol resistant foam, dry chemical, carbon dioxide (CO <sub>2</sub> ) extinguisher or spray.
<b>Unsuitable Media:</b>	CAUTION: Use of water spray when fighting fire may be inefficient.
<b>Specific Hazards Arising from the Chemical:</b>	Keep product and empty container away from heat and sources of ignition as product will burn. Contact with strong oxidizers may cause fire. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be contained, prevented from being discharged to any waterway, sewer or drain and disposed of in accordance with local regulations.
<b>Hazardous Combustion Products:</b>	Combustion products may include the following: Carbon dioxide (CO <sub>2</sub> ) Carbon monoxide (CO), and Nitrogen oxides.
<b>Protection of Fire Fighters:</b>	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## Section 6. Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel:</b>	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.
<b>For emergency responders:</b>	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. See also the information in "For non-emergency personnel".
<b>Environmental precautions:</b>	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See Section 12 for ecological information.

### Methods and materials for containment and cleaning up

<b>Small Spills:</b>	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
<b>Large Spills:</b>	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

NOTE: If RQ (Reportable Quantity) is exceeded or if spills enter a body of water, report immediately to the USEPA's National Response Center at (800) 424-8802. Check with your local and state regulators regarding their reporting requirements.



## Section 7. Handling and Storage

### Precautions for safe handling

**Protective measures:** Eye protection and face shield should be used if material is used under conditions that increase the chances of splattering. Put on appropriate personal protective equipment (see Section 8). Keep out of reach of children.

NOTE: Product diluted with gasoline must be handled with the same precautions used for gasoline. Before mixing, the Safety Data Sheet for gasoline should be consulted for any precautionary measures necessary.

### Advice on general occupational hygiene:

Do not get in eyes, on skin or on clothing. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas.  
See also Section 8 for additional information on hygiene measures.

### Conditions for safe storage, including any incompatibilities:

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, strong oxidizing agents (see Section 10) and food and drink. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination. Avoid contaminating soil or releases into sewage or drainage systems and bodies of water.

## Section 8. Exposure Controls/Personal Protection

### Control parameters

#### Occupational Exposure Limits

Chemical name	ACGIH		OSHA		NIOSH	
	TLV	STEL	PEL	STEL	TWA	Ceiling
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15-C50)	5 mg/m <sup>3</sup> (mist)	10 mg/m <sup>3</sup> (mist)	5 mg/m <sup>3</sup> (mist)	–	–	–

**Appropriate engineering controls:** Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Emergency shower and eyewash station.

**Environmental exposure controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/Face Protection:** Wear safety glasses with side shields. A face shield may be necessary under some conditions.

### Skin and Body Protection

**Hand protection:** Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. Consult your supervisor or Standard Operating Procedure (SOP) for special handling instructions.

**Body protection:** No protective equipment is needed under normal use conditions. For non-routine tasks, personal protection equipment for the body should be selected based on the

task being performed and the risks involved.

**Other skin protection:**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

**Respiratory protection:**

No respiratory protection is normally required. If user operation generates an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from measured concentrations of this material. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

## Section 9. Physical and Chemical Properties

<u>Appearance</u>	<u>(Typical or Target)</u>
Physical State:	Liquid
Color:	Blue
Odor:	Petroleum distillates
Odor threshold:	Not available
pH:	Not applicable
Boiling Point:	Not available
Flash Point (Closed cup):	222°C (432°F) (Typical or Target)
Pour Point:	-25°C (-13°F) (Typical or Target)
Evaporation rate (Butyl acetate = 1):	Not available
Flammability (solid, gas):	Not applicable. Based on - Physical state
Flammable) Limit in Air	Not available
Vapor pressure:	Not available
Vapor density (Air = 1):	>1
Relative density:	0.8820 - 0.8990 g/l at 15°C (Typical or Target)
Solubility:	In soluble in water
Partition coefficient (n-Octanol/water):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity – Kinematic (cSt (mm <sup>2</sup> /s)@ 40°C):	85 to 100
Viscosity – Kinematic (cSt (mm <sup>2</sup> /s) @ 100°C):	10.3 to 12
VOC %:	<0.026%

## Section 10. Stability and Reactivity

Reactivity:	Not reactive under normal storage conditions
Chemical stability:	Stable under normal storage conditions
Possibility of hazardous reactions:	None under normal processing.
Hazardous polymerization:	Hazardous polymerization does not occur.
Conditions to avoid:	Heat, flames and sparks.
Incompatible materials:	Oxidizing agents, Halogens, Halogenated compounds
Hazardous decomposition products:	May include: Fumes, Oil vapors, Smoke, Carbon Oxides (including carbon monoxide and carbon dioxide), Aldehydes, Nitrogen oxides, and incomplete combustion products.

## Section 11. Toxicological Information

Information on toxicological effects

**Basis for Assessment:** Information given is based on product data, a knowledge of the components and the toxicity of similar products.

**Likely Routs of Exposure:** Exposure may occur via skin absorption, skin or eye contact, inhalation, ingestion.

Substance/Mixture

Acute Toxicity	Oral LD50	Dermal LD50	Inhalation LC50
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15- C50) Mixture - Typical	>2000 mg/Kg (rat)	>2000 mg/Kg (rabbit)	>2.18 mg/L (rat) 4h (mist)

<b>Aspiration hazard:</b>	Not expected to be an aspiration hazard.
<b>Skin Corrosion/Irritation:</b>	No known significant effects or critical hazards.
<b>Serious Eye Damage/Irritation:</b>	No known significant effects or critical hazards.
<b>Skin Sensitization:</b>	No known significant effects or critical hazards.
<b>Respiratory Sensitization:</b>	No known significant effects or critical hazards.
<b>Specific Target Organ Toxicity (Single Exposure) - STOT-SE:</b>	No known significant effects or critical hazards.
<b>Specific Target Organ Toxicity (Repeated Exposure) – STOT-RE:</b>	No known significant effects or critical hazards.
<b>Carcinogenicity:</b>	No known significant effects or critical hazards.
<b>Germ Cell Mutagenicity:</b>	No known significant effects or critical hazards.
<b>Reproductive Toxicity</b>	No known significant effects or critical hazards.

#### Information on Toxicity Effects of Compounds

##### Lubricant Base Mineral Oil (Petroleum)

Mineral oils are known to cause cancer because of carcinogenic components (e.g. Benzene). The lubricant base mineral oils in this product have been highly refined by a variety of processes including severe solvent extraction, severe hydro cracking or severe hydro treating to reduce aromatics and improve performance characteristics. The oils in the is product meets the IP-346 criteria of less than 3 percent PHA's and are not considered to be a carcinogen by the International Agency for Research on Cancer.

None of the oils in this product requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IRAC) as: carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

##### 2-Cycle engine oils mix with gasoline:

2-cycle engine oils diluted with gasoline must be handled with the same precautions used for gasoline. Before mixing, the Safety Data Sheet for gasoline should be consulted for any precautionary measures necessary.

## **Section 12. Ecological Information**

The information is based on data available for the material, the components of the material, and similar materials.

**Ecotoxicity:** No testing has been performed by the manufacturer. Ecotoxicity hazard is based on an evaluation of data for the components or a similar material. Not expected to be harmful to aquatic organisms.

**Mobility:** Base oil component – Low solubility and floats and is expected to migrate from water to land. Expected to partition to sediment and wastewater solids.

**Soil/water partition coefficient (K<sub>oc</sub>):** Not available.

##### Persistence and degradation

**Biodegradation:** The material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

##### Bioaccumulative potential

**Bioaccumulation:** This product is not expected to bioaccumulate through food chain in the environment.

**Other adverse effects:** No known significant effects or critical hazards.

**Other ecological information:** Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

## Section 13. Disposal Considerations

**Disposal recommendations based on material supplied.**

**Waste treatment methods:** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Consult the appropriate state, regional, or local regulations for additional requirements. The generation of waste should be avoided or minimized wherever possible.

**Product waste:** Significant quantities of waste product residues should not be disposed of via the sanitary sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Incineration or landfill should only be considered when recycling is not feasible. Oil collection services are available for used oil recycling.

**Contaminated packaging:** Empty containers or liners may retain some product residues and could pose a potential fire and explosion hazard. Do not cut, puncture, or weld containers.

**Other information:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport Information

**General information:** Petroleum Lubricating oil - Not regulated.

	DOT Classification	IMDG	IATA
Stihl HP 2-Cycle	Not Regulated	Not Regulated	Not Regulated

**Special precautions for user:** Transport within user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory Information

### United States Regulations

**United States Inventory (TSCA 8b):** All components are listed or exempted.  
**SARA 302/304:** No products were found.

**SARA 311/312:**

Immediate (Acute) Health Effects:	No
Delayed (Chronic) Health Effects:	No
Fire Hazard:	No
Sudden Release of Pressure Hazard:	No
Reactivity Hazard:	No

**SARA 313:**

The following components of this material are found on the EPCRA 313 list:

None

**Supplier notification:** This product does not contain any hazardous ingredients at or above regulated thresholds.

**CWA (Clean Water Act):** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA:** This material, as supplied, does not contain any substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

**State Regulations**

<b>Massachusetts:</b>	None of the components are at or above regulated thresholds.
<b>New Jersey:</b>	None of the components are at or above regulated thresholds.
<b>Pennsylvania:</b>	None of the components are at or above regulated thresholds.
<b>California Proposition 65:</b>	WARNING: This product contains a chemical known to the State of California to cause cancer. Ethylbenzene - <0.1

**Canada**

**WHMIS Hazard Class:** Not classified.

**International Chemical Inventories:**

All components comply with the following chemical inventory requirements: DSL (Canada)

## Section 16. Other Information

<b>NFPA Rating:</b>	<b>Health Hazard – 1</b>	<b>Flammability – 1</b>	<b>Instability/Reactivity – 0</b>
<b>HMIS Rating:</b>	<b>Health Hazard – 1</b>	<b>Flammability – 1</b>	<b>Physical Hazards – 0</b>

(NFPA & HMIS Hazard Rating Key: 0 - Minimum Hazard; 1 - Slight Hazard; 2 - Moderate Hazard; 3 - High Hazard; 4 - Extreme Hazard; \* - Chronic Hazard Indicator, & PPE - Personal Protective Equipment Index A to L. These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS or Hazardous Material Identification System).

**Key to abbreviations:**

OSHA = Occupational Safety and Health Administration  
 ACGIH= American Conference of Industrial Hygienists  
 ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 CAS = Chemical Abstracts Service Registry Number  
 cSt = Centistroke (mm<sup>2</sup>/s)  
 GHS = Global Harmonized System of Classification and Labeling Of Chemicals.  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient  
 OEL = Occupational Exposure Limit  
 SDS = Safety Data Sheet  
 STEL = Short term exposure Limit  
 UN = United Nations  
 UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transportation of Dangerous Goods

**Prepared By:** OMNI Specialty Packaging EH&S Department

**Revision Date:** June 2, 2015

**Status:** Final

**Revision Note:** Revision 001 of OSHA GHS SDS format.

**Consumer Product Improvement Act of 2008, General Conformity Certification**

**For Consumer Product Packages:** This product has been evaluated and is certified to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission. Where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No testing is required to certify compliance with the provisions. The date of the manufacturing is stamped on the product container.

**Disclaimer**

All reasonably practicable steps have been taken to ensure the information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This information is furnished upon condition that the person receiving it shall make their own determination of the suitability of the material for their particular purpose.

## STIHL PLATINUM BAR & CHAIN OIL

Packaged for Stihl Incorporated, 536 Viking Drive, Virginia Beach, VA 23452



# Safety Data Sheet

Conforms to HCS 2012 (29 CFR 1910.1200)

## Section 1. Identification

### Product identifier

<b>Product Name:</b>	STIHL PLATINUM BAR & CHAIN OIL
<b>Other names:</b>	F-4
<b>Part/Product Number(s):</b>	0781-516-5001, 0781-516-5003, 0781-516-5005, 0781-516-5006, 0781-516-5007, 7010-871-181, 7010-871-0211
<b>Material Use:</b>	Bar and chain oil, lubricant
<b>Uses advised against:</b>	Not for internal engine use.
<b>Manufacturer:</b>	Omni Specialty Packaging, LLC 10399 Hwy 1 South Shreveport, LA 71115 1-318-524-1100
<b>Issuing date:</b>	May 8, 2015
<b>Revision date:</b>	June 2, 2015
<b>Revision number:</b>	001
<b>Company contact:</b>	OMNI EHS Department; E-Mail: <a href="mailto:sds@osp.cc">sds@osp.cc</a> ; Contact phone: 318-524-1100 (Monday-Friday, 8:00 AM – 4:00 PM, CST)
<b>In case of emergency :</b>	CHEMTREC: Within USA and Canada: 1 (800) 524-9300 (24/7) CHEMTREC Outside USA and Canada: +1 703-527-3887 (24/7)

## Section 2. Hazards Identification

<b>OSHA/HCS Status:</b>	This product is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>GHS Classification of the Substance or Mixture:</b>	Not classified
<b><u>GHS Label Elements</u></b>	
<b>Hazard pictograms:</b>	None
<b>Signal word:</b>	None
<b>Hazard statement:</b>	None
<b><u>Precautionary statements</u></b>	
<b>General:</b>	Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
<b>Prevention:</b>	Not applicable
<b>Response:</b>	Not applicable
<b>Storage:</b>	Not applicable
<b>Disposal:</b>	Not applicable
<b>Hazards not otherwise classified (HNOC):</b> Defatting to the skin.	

### Section 3. Composition/Information on Ingredients

Petroleum mineral oil lubricant base stock with proprietary performance additives mixture.

**Substance/mixture:** Mixture

<b>Components Name</b>	<b>CAS number</b>	<b>Weight %*</b>
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15-C50)	Various	95 – 99
Bar & Chain Oil Additive Mixture	Proprietary	1-5

This product does not contain known hazardous materials at the  $\geq 1\%$  level or known carcinogens at the  $\geq 0.1\%$  level as defined by 29 CFR 1910.1200.

\* The exact percentage of composition has been withheld as a trade secret.

### Section 4. First Aid Measures

#### Description of necessary first aid measures

- General Advice:** No specific first aid measures are required. Get medical attention if irritation develops and persists.
- Eye contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention if irritation develops and persists.
- Skin contact:** Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation or allergic reaction develops and persists.
- Inhalation:** In case of inhalation of decomposition products in a fire, symptoms may be delayed. If inhaled, remove to fresh air. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical attention if symptoms occur.
- Ingestion:** Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician.
- Protection of first-aiders:** No action shall be taken involving any personal risk or without suitable training. Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).

#### Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

#### **Most Important**

**Symptoms and Effects:** Personnel with pre-existing skin disorders should avoid contact with this product. Under normal use conditions, no adverse effects to health are known.

**Eye contact:** Not expected to cause prolonged or significant eye irritation.

**Skin contact:** Contact with skin is not expected to cause prolonged or significant irritation. Contact with skin is not expected to cause an allergic skin response. Not expected to be harmful to internal organs if absorbed through the skin.

**Inhalation:** Not expected to be harmful if inhaled. Contains petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficult breathing.

**Ingestion:** Not expected to be harmful if swallowed.

**Note to physician:** Treat symptomatically.

## Section 5. Fire-Fighting Measures

**Uniform Fire Code:** Class IIIB

**Flash Point:** >93.3°C (>200°F)

### Extinguishing Media

**Suitable Media:** In case of fire, use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water fog, alcohol resistant foam, dry chemical, carbon dioxide (CO<sub>2</sub>) extinguisher or spray.

**Unsuitable Media:** CAUTION: Use of water spray when fighting fire may be inefficient.

### **Specific Hazards Arising from the Chemical:**

Keep product and empty container away from heat and sources of ignition as product will burn. Contact with strong oxidizers may cause fire. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be contained, prevented from being discharged to any waterway, sewer or drain and disposed of in accordance with local regulations.

**Hazardous Combustion Products:** Combustion products may include the following: Carbon dioxide (CO<sub>2</sub>) Carbon monoxide (CO), and Nitrogen oxides.

**Protection of Fire Fighters:** Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## Section 6. Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Do not touch or walk through spilled material. Put on appropriate personal protective equipment (see Section 8). Floors may be slippery; use care to avoid falling.

**For emergency responders:** If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. Ensure adequate ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. See also the information in "For non-emergency personnel".

**Environmental precautions:** Avoid dispersal of spilled material onto soil or into waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). See Section 12 for ecological information.

### Methods and materials for containment and cleaning up

**Small Spills:** Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large Spills:** Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material (e.g. sand, earth, vermiculite or diatomaceous earth) and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

NOTE: If RQ (Reportable Quantity) is exceeded or if spills enter a body of water, report immediately to the USEPA's National Response Center at (800) 424-8802. Check with your local and state regulators regarding their reporting requirements.



## Section 7. Handling and Storage

### Precautions for safe handling

- Protective measures:** Safety glasses with side shields. Eye protection and face shield should be used if material is used under conditions that increase the chances of splattering. Put on appropriate personal protective equipment (see Section 8). Keep out of reach of children.
- Advice on general occupational hygiene:** Do not get in eyes, on skin or on clothing. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas.  
See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage, Including any incompatibilities:** Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, strong oxidizing agents (see Section 10) and food and drink. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination. Avoid contaminating soil or releases into sewage or drainage systems and bodies of water.
- Bulk material handling:** Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient.

## Section 8. Exposure Controls/Personal Protection

### Control parameters

#### Occupational Exposure Limits

Chemical name	ACGIH		OSHA		NIOSH	
	TLV	STEL	PEL	STEL	TWA	Ceiling
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15-C50)	5 mg/m <sup>3</sup> (mist)	10 mg/m <sup>3</sup> (mist)	5 mg/m <sup>3</sup> (mist)	–	–	–

- Appropriate engineering controls:** Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Emergency shower and eyewash station.
- Environmental exposure controls:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.
- Eye/Face Protection:** Wear safety glasses with side shields. A face shield may be necessary under some conditions.
- Skin and Body Protection**
- Hand protection:** Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. Consult your supervisor or Standard Operating Procedure (SOP) for special handling instructions.
- Body protection:** No protective equipment is needed under normal use conditions. For non-routine tasks, personal protection equipment for the body should be selected based on the task being performed and the risks involved.
- Other skin protection:** Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

**Respiratory protection:** No respiratory protection is normally required. If user operation generates an oil mist, determine if airborne concentrations are below the occupational exposure limit for mineral oil mist. If not, wear an approved respirator that provides adequate protection from measured concentrations of this material. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. For air-purifying respirators use a particulate cartridge. Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

**Section 9. Physical and Chemical Properties**

<b>Appearance</b>	<b>(Typical or Target)</b>
<b>Physical State:</b>	Liquid
<b>Color:</b>	Straw colored
<b>Odor:</b>	Petroleum like
<b>Odor threshold:</b>	Not available
<b>pH:</b>	Not applicable
<b>Boiling Point:</b>	Not available
<b>Flash Point (Closed cup):</b>	>93.3°C (>200°F) (Typical or Target)
<b>Evaporation rate (Butyl acetate = 1):</b>	Not available
<b>Flammability (solid, gas):</b>	Not applicable. Based on - Physical state
<b>Flammable) Limit in Air</b>	Not available
<b>Vapor pressure:</b>	Not available
<b>Vapor density (Air = 1):</b>	>1
<b>Relative density:</b>	0.90 - 0.92 g/l at 15°C (Typical or Target)
<b>Solubility:</b>	In soluble in water
<b>Partition coefficient (n-Octanol/water):</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>Viscosity – Kinematic (cSt (mm2/s)@ 40°C):</b>	120 – 173
<b>Viscosity – Kinematic (cSt (mm2/s) @ 100°C):</b>	10 – 12.4
<b>VOC %:</b>	0 %

**Section 10. Stability and Reactivity**

<b>Reactivity:</b>	Not reactive under normal storage conditions
<b>Chemical stability:</b>	Stable under normal storage conditions
<b>Possibility of hazardous reactions:</b>	None under normal processing.
<b>Hazardous polymerization:</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid:</b>	Heat, flames and sparks.
<b>Incompatible materials:</b>	Oxidizing agents and open flames.
<b>Hazardous decomposition products:</b>	May include: Fumes, Oil vapors, Smoke, Carbon Oxides (including carbon monoxide and carbon dioxide), Aldehydes, Nitrogen oxides, and incomplete combustion products.

**Section 11. Toxicological Information**

Information on toxicological effects

**Basis for Assessment:** Information given is based on product data, a knowledge of the components and the toxicity of similar products.

**Likely Routs of Exposure:** Exposure may occur via skin absorption, skin or eye contact, inhalation, ingestion.

**Substance/Mixture**

<b>Acute Toxicity</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Lubricant Base Oil (Petroleum) Highly refined mineral oils (C15- C50) Mixture - Typical	>2000 mg/Kg (rat)	>2000 mg/Kg (rabbit)	>2.18 mg/L (rat) 4h (mist)

**Aspiration hazard:** Not expected to be an aspiration hazard.

<b>Skin Corrosion/Irritation:</b>	No known significant effects or critical hazards.
<b>Serious Eye Damage/Irritation:</b>	No known significant effects or critical hazards.
<b>Skin Sensitization:</b>	No known significant effects or critical hazards.
<b>Respiratory Sensitization:</b>	No known significant effects or critical hazards.
<b>Specific Target Organ Toxicity (Single Exposure) - STOT-SE:</b>	No known significant effects or critical hazards.
<b>Specific Target Organ Toxicity (Repeated Exposure) – STOT-RE:</b>	No known significant effects or critical hazards.
<b>Carcinogenicity:</b>	No known significant effects or critical hazards.
<b>Germ Cell Mutagenicity:</b>	No known significant effects or critical hazards.
<b>Reproductive Toxicity</b>	No known significant effects or critical hazards.

### Information on Toxicity Effects of Compounds

#### Lubricant Base Mineral Oil (Petroleum)

Mineral oils are known to cause cancer because of carcinogenic components (e.g. Benzene). The lubricant base mineral oils in this product have been highly refined by a variety of processes including severe solvent extraction, severe hydro cracking or severe hydro treating to reduce aromatics and improve performance characteristics. The oils in the is product meets the IP-346 criteria of less than 3 percent PHA's and are not considered to be a carcinogen by the International Agency for Research on Cancer.

None of the oils in this product requires a cancer warning under the OSHA Hazard Communication Standard (29 CFR 1910.1200). These oils have not been listed in the National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IRAC) as: carcinogenic to humans (Group 1), probably carcinogenic to humans (Group 2A), or possibly carcinogenic to humans (Group 2B). These oils have not been classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as: confirmed human carcinogen (A1), suspected human carcinogen (A2), or confirmed animal carcinogen with unknown relevance to humans (A3).

## **Section 12. Ecological Information**

The information is based on data available for the material, the components of the material, and similar materials.

**Ecotoxicity:** No testing has been performed by the manufacturer. Ecotoxicity hazard is based on an evaluation of data for the components or a similar material. Not expected to be harmful to aquatic organisms.

**Mobility:** Base oil component – Low solubility and floats on water and is expected to migrate from water to land. Expected to partition to sediment and wastewater solids.

#### Persistence and degradation

**Biodegradation:** The material is not expected to be readily biodegradable. The biodegradability of this material is based on an evaluation of data for the components or a similar material.

#### Bioaccumulative potential

**Bioaccumulation:** This product is not expected to bioaccumulate through food chain in the environment.

**Other adverse effects:** No known significant effects or critical hazards.

**Other ecological information:** Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

## **Section 13. Disposal Considerations**

**Disposal recommendations based on material supplied.**

**Waste treatment methods:** This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Consult the appropriate state, regional, or local regulations for additional requirements. The generation of waste should be avoided or minimized wherever possible.

**Product waste:** Significant quantities of waste product residues should not be disposed of via the sanitary sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-

recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Incineration or landfill should only be considered when recycling is not feasible. Oil collection services are available for used oil recycling.

**Contaminated packaging:** Empty containers or liners may retain some product residues and could pose a potential fire and explosion hazard. Do not cut, puncture, or weld containers.

**Other information:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport Information

**General information:** Petroleum Lubricating oil - Not regulated.

	DOT Classification	IMDG	IATA
Bar & Chain Oil	Not Regulated	Not Regulated	Not Regulated

**Special precautions for user:** Transport within user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory Information

### United States Regulations

**United States Inventory (TSCA 8b):** All components are listed or exempted.

**SARA 302/304:** No products were found.

**SARA 311/312:** Immediate (Acute) Health Effects: No  
 Delayed (Chronic) Health Effects: No  
 Fire Hazard: No  
 Sudden Release of Pressure Hazard: No  
 Reactivity Hazard: No

**SARA 313:**

The following components of this material are found on the EPCRA 313 list:  
 None

**Supplier notification:** This product does not contain any hazardous ingredients at or above regulated thresholds.

**CWA (Clean Water Act):** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA:** This material, as supplied, does not contain any substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

### State Regulations

**Massachusetts:** None of the components are at or above regulated thresholds.

**New Jersey:** None of the components are at or above regulated thresholds.

**Pennsylvania:** None of the components are at or above regulated thresholds.

**California Proposition 65:** WARNING: This product contains a chemical known to the State of California to cause cancer.  
 None

### Canada

**WHMIS Hazard Class:** Not classified. This Product Is Not Controlled Under WHMIS (Canada)

### International Chemical Inventories:

All components comply with the following chemical inventory requirements: DSL (Canada)

## Section 16. Other Information

<b>NFPA Rating:</b>	<b>Health Hazard – 1</b>	<b>Flammability – 1</b>	<b>Instability/Reactivity – 0</b>
<b>HMIS Rating:</b>	<b>Health Hazard – 1</b>	<b>Flammability – 1</b>	<b>Physical Hazards – 0</b>

(NFPA & HMIS Hazard Rating Key: 0 - Minimum Hazard; 1 - Slight Hazard; 2 - Moderate Hazard; 3 - High Hazard; 4 - Extreme Hazard; \* - Chronic Hazard Indicator, & PPE - Personal Protective Equipment Index A to L. These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS or Hazardous Material Identification System).

### Key to abbreviations:

OSHA = Occupational Safety and Health Administration  
 ACGIH= American Conference of Industrial Hygienists  
 ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 CAS = Chemical Abstracts Service Registry Number  
 cSt = Centistroke (mm<sup>2</sup>/s)  
 GHS = Global Harmonized System of Classification and Labeling  
 Of Chemicals.  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient  
 OEL = Occupational Exposure Limit  
 SDS = Safety Data Sheet  
 STEL = Short term exposure Limit  
 UN = United Nations  
 UN Number = United Nations Number, a four digit number  
 assigned by the United Nations Committee of Experts on  
 the Transportation of Dangerous Goods

**Prepared By:** OMNI Specialty Packaging EH&S Department

**Revision Date:** June 2, 2015

**Status:** Final

**Revision Note:** Revision 001 of OSHA GHS SDS format.

### [Consumer Product Improvement Act of 2008, General Conformity Certification](#)

**For Consumer Product Packages:** This product has been evaluated and is certified to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission. Where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No testing is required to certify compliance with the provisions. The date of the manufacturing is stamped on the product container.

### Disclaimer

All reasonably practicable steps have been taken to ensure the information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. This information is furnished upon condition that the person receiving it shall make their own determination of the suitability of the material for their particular purpose.

**End of Safety Data Sheet**



# Safety Data Sheet

**The Armor All/STP Products Company**

44 Old Ridgebury Road  
 Suite 300  
 Danbury, CT 06810  
 Tel. 1-203-205-2900

## 1. Product And Company Identification

**Product Name:** STP® Power Steering Fluid

**Responsible Party:** The Armor All/STP Products Company  
 44 Old Ridgebury Road  
 Suite 300  
 Danbury, CT 06810

**Information Phone Number:** +1 203-205-2900

**Emergency Phone Number:**

For Medical Emergencies, call 1-866-949-6465 / +1 303-389-1332 (Outside US and Canada)  
 For Transportation Emergencies, call 1-800-424-9300 (Chemtrec) +1-703-527-3887 for  
 Outside US and Canada (call collect)

**SDS Date Of Preparation:** 06/19/15

**Product Use:** Automotive maintenance product – For consumer and professional use

## 2. Hazards Identification

Note: This product is a consumer product and is labeled in accordance with the Consumer Product Safety Commission regulations and not OSHA regulations. The requirements for the labeling of consumer products take precedence over OSHA labeling so the actual product label will differ from the OSHA label elements.

**GHS Classification:**

<b>Physical:</b>	<b>Health:</b>
Not Hazardous	Not Hazardous

**GHS Label Elements:** None

## 3. Composition/Information On Ingredients

Component	CAS No.	Amount
Mineral Oil	64742-54-7/64742-65-0	90-100%
Zinc alkyl dithiophosphate	68649-42-3	<1%

## 4. First Aid Measures

**Inhalation:** If symptoms of exposure develop, remove to fresh air. Get medical attention if symptoms appear and persist.

**Skin Contact:** Remove contaminated clothing and launder before reuse. Wash exposed skin with soap and water. If skin irritation or redness develops, get medical attention. High pressure injection of this product through the skin is a medical emergency. This product must be removed completely from under the skin. Seek immediate medical attention.

**Eye Contact:** Flush eyes with plenty of water. If irritation or other symptoms persist, seek medical attention.

**Ingestion:** DO NOT induce vomiting. If the victim is fully conscious, have them drink a glass of water. Get medical assistance by calling a doctor or poison center. Never give anything by mouth to a person who is unconscious or drowsy.



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**Most Important Symptoms:** Direct eye contact may cause mild irritation. Inhalation of mists or vapors generated at elevated temperatures may cause respiratory irritation. Prolonged skin contact may cause dryness and defatting.

**Indication of Immediate Medical Attention/Special Treatment:** High pressure injection of this product through the skin is a medical emergency.

### 5. Firefighting Measures

**Suitable (and Unsuitable) Extinguishing Media:** Use water fog, foam, carbon dioxide or dry chemical. Cool fire exposed containers with water.

**Specific Hazards Arising from the Chemical:** Will burn under fire conditions. Closed containers may rupture if exposed to extreme heat. Burning may produce carbon monoxide and carbon dioxide, zinc oxide and hydrocarbons.

**Special Protective Equipment and Precautions for Fire-fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

### 6: Accidental Release Measures

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Caution – slip hazard. Eliminate all ignition sources and ventilate the area. Wear appropriate protective equipment.

**Environmental Precautions:** Prevent entry in storm sewers and waterways. Report spill as required by local and national regulations. Notify the National Response Center if a spill of any amount enters navigable waters, the contiguous zone, or adjoining shorelines.

**Methods for Containment and Clean-Up:** Stop spill at the source if it is safe to do so. Absorb with an inert material. Collect into a suitable container for disposal. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard.

### 7. Handling and Storage

**Precautions for Safe Handling:** Avoid contact with eyes. Avoid prolonged contact with skin and clothing. Avoid breathing vapors and mists. Wash exposed skin thoroughly with soap and water after use. Keep containers closed when not in use. Keep out of the reach of children.

Empty containers retain product residue and may be hazardous. Do not reuse empty containers.

**Conditions for Safe Storage, Including any Incompatibilities:** Store in a cool, dry, well-ventilated area. Store away from oxidizing agents and other incompatible materials.

### 8. Exposure Controls / Personal Protection

#### Exposure Guidelines:

CHEMICAL	EXPOSURE LIMIT
Mineral Oil	5 mg/m <sup>3</sup> inhalable TWA ACGIH TLV 5 mg/m <sup>3</sup> TWA OSHA PEL (as mist)



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Zinc alkyl dithiophosphate

None Established

**Engineering Controls:** General ventilation should be adequate for all normal use. For operations where the TLV may be exceeded, forced ventilation such as local exhaust may be needed to maintain exposures below applicable limits.

### Personal Protective Equipment

**Respiratory Protection:** None under normal use conditions. For operations where the TLV is exceeded, a NIOSH approved respirator with an organic vapor cartridge and a dust/mist prefilter or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

**Gloves:** None normally required. Impervious gloves such as neoprene or nitrile are recommended if needed to avoid prolonged or repeated skin contact.

**Eye Protection:** None required for normal use. Avoid eye contact. Safety glasses or goggles are recommended if eye contact is possible.

**Other Protective Equipment/Clothing:** None required under normal use conditions.

## 9. Physical and Chemical Properties

**Appearance And Odor:** Light to dark amber liquid with a petroleum-like odor.

<b>Physical State:</b> Liquid	<b>Odor Threshold:</b> Not determined
<b>pH:</b> Not applicable	<b>Specific Gravity:</b> 0.85
<b>Initial Boiling Point/Range:</b> >620°F (326°C)	<b>Vapor Pressure:</b> Not determined
<b>Melting/Freezing Point:</b> Not determined	<b>Vapor Density:</b> Not determined
<b>Solubility In Water:</b> Negligible (0-1%)	<b>Percent Volatile:</b> Nil
<b>Viscosity:</b> 41.4 – 50.6 cSt @ 40°C	<b>Evaporation Rate:</b> Not determined
<b>Coefficient Of Water/Oil Distribution:</b> Not determined	<b>VOC Content:</b> Not determined
<b>Flash Point:</b> 390°F (200°C) COC minimum	<b>Autoignition Temp:</b> Not determined
<b>Decomposition Temperature:</b> Not determined	<b>Flammability Limits:</b> LEL: Not determined UEL: Not determined
<b>Flammability (solid, gas):</b> Not applicable	

## 10. Stability and Reactivity

**Reactivity:** Not normally reactive

**Chemical Stability:** Stable.

**Possibility of Hazardous Reactions:** None known

**Conditions To Avoid:** Keep away from excessive heat and open flames.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** May produce carbon monoxide, carbon dioxide, zinc oxide and hydrocarbons.



**11. Toxicological Information****POTENTIAL HEALTH EFFECTS:****Acute Hazards:**

**Inhalation:** Inhalation of mists or vapors generated at elevated temperatures may cause upper respiratory tract irritation.

**Skin Contact:** Not a skin irritant. Prolonged or repeated contact may cause defatting and drying of the skin and dermatitis. High pressure injection of this product through the skin may cause possible extensive tissue damage resulting in loss of a finger, hand or arm. There may be no sign of initial injury or pain.

**Eye Contact:** Direct contact may cause slight eye irritation.

**Ingestion:** Swallowing may cause gastrointestinal irritation with nausea, vomiting and diarrhea.

**Chronic Hazards:** None currently known.

**Carcinogenicity Listing:** None of the components is listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH or OSHA.

**Acute Toxicity Values:**

Mineral Oil: LD50 Oral Rat: >5,000 mg/kg  
LD50 Skin Rabbit: >5,000 mg/kg  
Zinc alkyl dithiophosphate:  
LD50 Oral Rat: 2,230-3,100 mg/kg  
LD50 Skin Rat >2,000 mg/kg

**12. Ecological Information****Ecotoxicity:**

Mineral Oil:

LC50 Rainbow trout (*Oncorhynchus mykiss*): > 5,000 mg/L / 96hr.  
LC50 water flea (*Daphnia magna*): > 1,000 mg/L / 48hr.

**Persistence and Degradability:**

No data available.

**Bio accumulative Potential:**

No data available.

**Mobility in Soil:**

No data available.

**Other Adverse Effects:** No data available.



## Safety Data Sheet

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### 13. Disposal Considerations

Dispose of in accordance with all local, state/provincial and federal regulations. Offer empty containers for recycling.

### 14. Transport Information

**DOT Hazardous Materials Description:** Not Regulated

**Canadian TDG Hazardous Materials Description:** Not Regulated

**IMDG Dangerous Goods Description:** Not Regulated

### 15. Regulatory Information

#### United States:

**EPA TSCA INVENTORY:** All of the components of this material are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

**CERCLA Section 103:** This product has no RQ, however, oil spills must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**SARA Hazard Category (311/312):** Not hazardous

**SARA 313:** This product contains the following chemicals subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): Zinc compounds below deminimus concentration

#### Canada:

**Canadian Environmental Protection Act:** All of the ingredients are listed on the Canadian DSL.

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

### 16. Other Information

NFPA Rating (NFPA 704):	Health: 0	Fire: 1	Instability: 0
HMIS Rating:	Health: 0	Fire: 1	Physical Hazard: 0

DATE OF CURRENT REVISION: 06/19/2015

REVISION SUMMARY: Update to OSHA HazCom 2012 GHS format. Changes to all sections.

DATE OF PREVIOUS REVISION: 09/10/2014

DATA SUPPLIED IS FOR USE ONLY IN CONNECTION WITH OCCUPATIONAL SAFETY AND HEALTH

# SuperS® Gear Oils

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Version: GEAR.001



### SECTION 1: IDENTIFICATION

#### 1.1. Product Identifier

**Product Form:** Mixture

**Product Name:** SuperS Gear Oils

**Product Grades:** 75W-140, 75W-90, 80W-90, 80W-90LS, 85W-140, 85W-140LS

**Product Codes:** See section 16

**Synonyms:** Gear Oil

#### 1.2. Intended Use of the Product

Gear Oil

#### 1.3. Name, Address, and Telephone of the Responsible Party

##### Company

Smitty's Supply, Inc.

PO BOX 530

Roseland, LA 70456

985-748-8214

[www.smittysinc.net](http://www.smittysinc.net)

#### 1.4. Emergency Telephone Number

**Emergency Number** : 1-800-424-9300, CHEMTREC

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

##### Classification (GHS-US)

Not Classified

Full text of H-phrases: see section 16

#### 2.2. Label Elements

##### GHS-US Labeling

**Hazard Pictograms (GHS-US)** : None Required

**Signal Word (GHS-US)** : Not Hazardous

**Hazard Statements (GHS-US)** : None Required

**Precautionary Statements (GHS-US)** : P273 - Avoid release to the environment.  
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

#### 2.3. Other Hazards

The mixture consists of substances capable of producing an aspiration hazard. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure, and even death.

#### 2.4. Unknown Acute Toxicity (GHS-US)

17.29 percent of the mixture consists of ingredient(s) of unknown acute toxicity.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substances

Not applicable

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### 3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Polybutene (Isobutylene/butene copolymer)	(CAS No) 9003-29-6	64 – 85, 0 - 10	Not Classified
Petroleum distillates, hydrotreated heavy naphthenic	(CAS No) 64742-52-5	0 - 10	Not Classified
Dec-1-ene, homopolymer hydrogenated	(CAS No) 68037-01-4	0 – 11, 10 – 17, 27 - 39	Aspiration Hazard 1, H304
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	(CAS No) 68649-42-3	0 - 2.7	Aquatic Chronic 3, H402

\*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

\*More than one of the ranges of concentration prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water or soap and water for at least 15 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

**General:** No known significant effects or critical hazards.

**Inhalation:** Overexposure may be irritating to the respiratory system.

**Skin Contact:** Repeated or prolonged skin contact may cause irritation.

**Eye Contact:** Direct contact with the eyes is likely irritating.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** No known significant effects or critical hazards.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

## SECTION 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not flammable but will support combustion.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be

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present.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Under fire conditions, may produce fumes, smoke, oxides of carbon and hydrocarbons.

**Other Information:** Refer to Section 9 for flammability properties.

### Reference to Other Sections

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

#### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### 6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Additional Hazards When Processed:** Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. Practice good housekeeping - spillage can be slippery on smooth surface either wet or dry.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers.

### 7.3. Specific End Use(s)

Gear Oil.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and

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safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Protective goggles. Gloves.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical goggles or safety glasses.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

**Environmental Exposure Controls:** Do not allow the product to be released into the environment.

**Consumer Exposure Controls:** Do not eat, drink or smoke during use.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Amber
Odor	: Slight Hydrocarbon
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Boiling Point	: Not available
Flash Point	: 204C / 400C
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: 0.85
Solubility	: Negligible
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Viscosity, Kinematic	: Not available
Explosive Properties	: Product is not explosive
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.

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- 10.2. **Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. **Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- 10.5. **Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- 10.6. **Hazardous Decomposition Products:** No decomposition expected under normal use and storage conditions.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified

**Eye Damage/Irritation:** Not classified

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not classified

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Overexposure may be irritating to the respiratory system.

**Symptoms/Injuries After Skin Contact:** Repeated or prolonged skin contact may cause irritation.

**Symptoms/Injuries After Eye Contact:** Direct contact with the eyes is likely irritating.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse gastrointestinal effects.

**Chronic Symptoms:** Not Classified

### 11.2. Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

<b>Polybutene (Isobutylene/butene copolymer) (9003-29-6)</b>	
LD50 Oral Rats	> 30 g/kg
LD50 Dermal Rabbits	> 10 g/kg
<b>Dec-1-ene, homopolymer hydrogenated (68037-01-4)</b>	
LD50 Oral Rat	> 5 ml/kg
LD50 Inhalation Rat	1,17 mg/l (exposure time 4 hours)
LD50 Dermal Rabbit	> 3 g/kg
<b>Petroleum distillates, hydrotreated heavy naphthenic (64741-52-5)</b>	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 5000 mg/kg
LD50 Inhalation Rat	> 5 mg/l (exposure time 4 hours)

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

**Ecology - General:** Toxic to aquatic life.

<b>Dec-1-ene, homopolymer hydrogenated (68037-01-4)</b>	
LL50 Fish	> 1000 mg/l (Exposure time 48 hours; Species Daphnia Magna)
EL50 Algae	> 1000 mg/l (Exposure time 72 hours; Species Scenedesmus capricornutum)
NOEC Daphnia	125 mg/l (Exposure time 21 days; Species Daphnia Magna)

### 12.2. Persistence and Degradability

Not available

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### 12.3. Bioaccumulative Potential

Not available

### 12.4. Mobility in Soil

Not available

### 12.5. Other Adverse Effects

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Sewage Disposal Recommendations:** Do not empty into drains; dispose of this material and its container in a safe way. Do not empty into drains. Do not dispose of waste into sewer.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

## SECTION 14: TRANSPORT INFORMATION

**14.1. In Accordance with DOT** Not regulated for transport

**14.2. In Accordance with IMDG** Not regulated for transport

**14.3. In Accordance with IATA** Not regulated for transport

**14.4. In Accordance with TDG** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### 15.1. US Federal Regulations

SARA Section 311/312 Hazard Classes	Not Classified
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### 15.2. US State Regulations

None noted

### 15.3. Canadian Regulations

WHMIS Classification	Not Classified
<b>Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts (68649-42-3)</b>	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 05/11/2015

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

H304	May be fatal if swallowed and enters airways.
H402	Harmful to aquatic life.
P273	Avoid release into the environment
P501	Dispose of contents/container in accordance with local, regional, national, and international regulations.

## Product Numbers

### SuperS GL-5 Multipurpose Gear Oil

SAE 80W-90 SUS 17 12/1 quart bottles SUS 82-3 3/1 gallon bottles SUS 82 6/1 gallon bottles SUS 52 35 Lb pail SUS 87 120 Lb



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Keg SUS 53 400 lb drum SUS 53Tote 275 Gal Tote SUS 53Bulk Bulk

**SAE 85W-140** SUS 25 12/1 quart bottles SUS 83-3 3/1 gallon bottles SUS 83 6/1 gallon bottles SUS 54 35 Lb pail SUS 88 120 Lb

Keg SUS 55 400 lb drum SUS 55Tote 275 Gal Tote SUS 55Tote Bulk

### **SuperS GL-5 Multipurpose Gear Oil – LS**

**SAE 80W-90** SUS 52LS 35 Lb pail SUS 87LS 120 Lb Keg SUS 53LS 400 lb drum

**SAE 85W-140** SUS 54LS 35 Lb pail SUS 88LS 120 Lb Keg SUS 55LS 400 lb drum SUS 55ToteLS 275 Gal Tote SUS 55bulkLS Bulk

#### **Party Responsible for the Preparation of This Document**

Smitty's Supply, Inc.

PO BOX 530

Roseland, LA 70456

985-748-8214

[www.smittysinc.net](http://www.smittysinc.net)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*

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29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : Synpower™ 75W90  
GEAR OIL

### Recommended use of the chemical and restrictions on use

<b>Details of the supplier of the safety data sheet</b> Ashland P.O. Box 2219 Columbus, OH 43216 United States of America  EHS Customer Requests@ashland.com	<b>Emergency telephone number</b> 1-800-ASHLAND (1-800-274-5263)  <b>Regulatory Information Number</b> 1-800-325-3751  <b>Product Information</b> 614-790-3333
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## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Eye irritation : Category 2A

Skin sensitization : Category 1

### GHS Label element

Hazard pictograms : 

Signal Word : Warning

Hazard Statements : May cause an allergic skin reaction.  
Causes serious eye irritation.

Precautionary Statements : **Prevention:**  
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
Wash skin thoroughly after handling.  
Contaminated work clothing must not be allowed out of the workplace.  
Wear eye protection/ face protection.  
Wear protective gloves.  
**Response:**  
IF ON SKIN: Wash with plenty of soap and water.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation or rash occurs: Get medical advice/ attention.

If eye irritation persists: Get medical advice/ attention.

Wash contaminated clothing before reuse.

**Disposal:**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

None known.

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**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

Chemical nature : Defatter

**Hazardous components**

Chemical Name	CAS-No.	Classification	Concentration (%)
HEAVY PARAFFINIC DISTILLATE	64742-54-7	Asp. Tox. 1; H304	61.42
DI-TERT-BUTYL POLYSULFIDE	68937-96-2	Flam. Liq. 4; H227 Skin Sens. 1B; H317	4.99
WHITE MINERAL OIL	8042-47-5	Not a hazardous substance or mixture.	2.90
Phosphoric acid esters, amine salt	91745-46-9	Acute Tox. 4; H302 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 2; H401 Aquatic Chronic 2; H411	1.99

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#### SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.  
Do not leave the victim unattended.
- If inhaled : If breathed in, move person into fresh air.  
If unconscious place in recovery position and seek medical advice.  
If symptoms persist, call a physician.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.  
If on skin, rinse well with water.  
First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water.  
Wash contaminated clothing before re-use.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Remove contact lenses.  
Protect unharmed eye.
- If swallowed : Do not give milk or alcoholic beverages.  
Never give anything by mouth to an unconscious person.  
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Acute aspiration of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Repeated aspiration of small quantities of mineral oil can produce chronic inflammation of the lungs (i.e. lipoid pneumonia) that may progress to pulmonary fibrosis. Symptoms are often subtle and radiological changes appear worse than clinical abnormalities. Occasionally, persistent cough, irritation of the upper respiratory tract, shortness of breath with exertion, fever, and bloody sputum occur. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.  
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:  
acne  
stomach or intestinal upset (nausea, vomiting, diarrhea)  
irritation (nose, throat, airways)  
May cause an allergic skin reaction.  
Causes serious eye irritation.
- Notes to physician : No hazards which require special first aid measures.

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## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide  
Hydrocarbons  
Aldehydes  
Sulphur oxides  
Hydrogen chloride gas  
Nitrogen oxides (NO<sub>x</sub>)  
Oxides of phosphorus
- Specific extinguishing methods :  
  
Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

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## SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

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## SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Do not breathe vapours/dust.  
Do not smoke.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.  
Container hazardous when empty.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
Smoking, eating and drinking should be prohibited in the application area.  
For personal protection see section 8.  
Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.  
Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
Electrical installations / working materials must comply with the technological safety standards.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
WHITE MINERAL OIL	8042-47-5	REL	5 mg/m3 Mist.	NIOSH/GUID E
		STEL	10 mg/m3 Mist.	NIOSH/GUID E
		PEL	5 mg/m3 Mist.	OSHA_TRANS
		TWA	5 mg/m3 Mist.	TN OEL
		TWA	5 mg/m3 Inhalable fraction.	ACGIH

- Engineering measures** : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

### Personal protective equipment

Hand protection

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- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.
- Skin and body protection : Wear as appropriate:  
 impervious clothing  
 Safety shoes  
 Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
 Discard gloves that show tears, pinholes, or signs of wear.  
 Wear resistant gloves (consult your safety equipment supplier).
- Hygiene measures : Wash hands before breaks and at the end of workday.  
 When using do not eat or drink.  
 When using do not smoke.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : liquid
- Odour : mild
- Odour Threshold : No data available
- pH : No data available
- Melting point/freezing point : No data available
- Boiling point/boiling range : No data available
- Flash point : > 390 °F / > 199 °C  
 Method: Cleveland open cup
- Evaporation rate : No data available
- Flammability (solid, gas) : No data available
- Upper explosion limit : 6 %(V)  
 Calculated Explosive Limit
- Lower explosion limit : 1 %(V)  
 Calculated Explosive Limit
- Vapour pressure : 1.3333333 hPa (20 °C)  
 Calculated Vapor Pressure
- Relative vapour density : No data available
- Relative density : No data available
- Density : 0.86 g/cm3 (15.56 °C)

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Solubility(ies)  
 Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity  
 Viscosity, dynamic : No data available

Viscosity, kinematic : 100 mm<sup>2</sup>/s (40 °C)

Oxidizing properties : No data available

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Conditions to avoid : excessive heat  
 Exposure to sunlight.

Incompatible materials : Iron  
 steel  
 Strong acids  
 Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide  
 Hydrocarbons  
 Hydrogen chloride gas  
 Nitrogen oxides (NO<sub>x</sub>)  
 Oxides of phosphorus  
 Sulphur oxides

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## SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation  
 Skin contact  
 Eye Contact



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### Ingestion

#### Acute toxicity

Not classified based on available information.

#### Components:

##### HEAVY PARAFFINIC DISTILLATE:

Acute oral toxicity : LD 50 (Rat): > 15 g/kg

Acute dermal toxicity : LD 50 (Rabbit): > 5 g/kg

##### DI-TERT-BUTYL POLYSULFIDE:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 402

##### WHITE MINERAL OIL:

Acute oral toxicity : LD 50 (Rat): 50,000 mg/kg

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg  
Assessment: Not classified as acutely toxic by dermal absorption under GHS.

##### Phosphoric acid esters, amine salt:

Acute oral toxicity : LD 50 (Rat): 2,000 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

#### Product:

Remarks: May cause skin irritation in susceptible persons.

#### Components:

##### HEAVY PARAFFINIC DISTILLATE:

Result: Mildly irritating to skin

##### DI-TERT-BUTYL POLYSULFIDE:

Result: Slightly to moderately irritating to skin

##### WHITE MINERAL OIL:

Result: Not irritating to skin

##### Phosphoric acid esters, amine salt:

Result: Mildly irritating to skin

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

#### Components:

##### HEAVY PARAFFINIC DISTILLATE:

Result: Not irritating to eyes

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**DI-TERT-BUTYL POLYSULFIDE:**

Result: Slightly irritating to eyes

**WHITE MINERAL OIL:**

Result: Not irritating to eyes

**Phosphoric acid esters, amine salt:**

Result: Severely irritating to eyes

**Respiratory or skin sensitisation**

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

**Components:**

**DI-TERT-BUTYL POLYSULFIDE:**

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Assessment: The product is a skin sensitiser, sub-category 1B.

Method: OECD Test Guideline 406

**Phosphoric acid esters, amine salt:**

Assessment: May cause sensitisation by skin contact.

**Germ cell mutagenicity**

Not classified based on available information.

**Components:**

**DI-TERT-BUTYL POLYSULFIDE:**

Genotoxicity in vitro : Test Type: in vitro assay  
Result: Positive results were obtained in some in vitro tests.

Genotoxicity in vivo : Test Type: Micronucleus test  
Test species: Mouse  
Cell type: Bone marrow  
Method: OECD Test Guideline 474  
Result: negative

**Carcinogenicity**

Not classified based on available information.

**Reproductive toxicity**

Not classified based on available information.

**STOT - single exposure**

Not classified based on available information.

**STOT - repeated exposure**

Not classified based on available information.

**Aspiration toxicity**

Not classified based on available information.

**Components:**

**HEAVY PARAFFINIC DISTILLATE:**

May be fatal if swallowed and enters airways.

**Further information**

**Product:**

Remarks: No data available

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**Carcinogenicity:  
IARC**

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

---

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Components:**

**HEAVY PARAFFINIC DISTILLATE:**

Toxicity to fish : LL50 (Fish): > 100 mg/l

Toxicity to daphnia and other aquatic invertebrates : EL50 (Aquatic invertebrates): > 10,000 mg/l

Toxicity to algae : EL50 (Algae, algal mat (Algae)): > 100 mg/l

Toxicity to fish (Chronic toxicity) : NOEC (Fish): 10 mg/l

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Aquatic invertebrates): 10 mg/l

**DI-TERT-BUTYL POLYSULFIDE:**

Toxicity to daphnia and other aquatic invertebrates : EC50 (Water flea (Daphnia magna)): 0.24 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): 2.45 mg/l  
End point: Growth inhibition  
Exposure time: 72 h  
Test Type: static test  
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (microalgae)): 0.1 mg/l  
End point: Growth inhibition  
Exposure time: 72 h

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Test Type: static test  
Method: OECD Test Guideline 201

Phosphoric acid esters, amine salt:  
Ecotoxicology Assessment  
Acute aquatic toxicity : Toxic to aquatic life.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

#### **Persistence and degradability**

##### **Components:**

##### **DI-TERT-BUTYL POLYSULFIDE:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 13 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301B

#### **Bioaccumulative potential**

##### **Components:**

##### **DI-TERT-BUTYL POLYSULFIDE:**

Partition coefficient: n- : log Pow: 5.6 (20 °C)  
octanol/water pH: 7

#### **Mobility in soil**

##### **Components:**

No data available

#### **Other adverse effects**

No data available

##### **Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

##### **Components:**

---

## **SECTION 13. DISPOSAL CONSIDERATIONS**

#### **Disposal methods**

General advice : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.  
  
Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.

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Dispose of as unused product.  
 Empty containers should be taken to an approved waste handling site for recycling or disposal.  
 Do not re-use empty containers.

**SECTION 14. TRANSPORT INFORMATION**

**International transport regulations**

**REGULATION**

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

**U.S. DOT - ROAD**

Not dangerous goods
---------------------

**U.S. DOT - RAIL**

Not dangerous goods
---------------------

**U.S. DOT - INLAND WATERWAYS**

Not dangerous goods
---------------------

**TRANSPORT CANADA - ROAD**

Not dangerous goods
---------------------

**TRANSPORT CANADA - RAIL**

Not dangerous goods
---------------------

**TRANSPORT CANADA - INLAND WATERWAYS**

Not dangerous goods
---------------------

**INTERNATIONAL MARITIME DANGEROUS GOODS**

Not dangerous goods
---------------------

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

Not dangerous goods
---------------------

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

Not dangerous goods
---------------------

**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

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Not dangerous goods

\*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	yes
------------------	-----

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

## SECTION 15. REGULATORY INFORMATION

**SARA 311/312 Hazards** : Acute Health Hazard

**SARA 313 Component(s)SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### Pennsylvania Right To Know

HEAVY PARAFFINIC DISTILLATE	64742-54-7	50.00 - 70.00 %
VISCOSITY MODIFIER	Not Assigned	20.00 - 30.00 %
DI-TERT-BUTYL POLYSULFIDE	68937-96-2	1.00 - 5.00 %
WHITE MINERAL OIL	8042-47-5	1.00 - 5.00 %

### New Jersey Right To Know

HEAVY PARAFFINIC DISTILLATE	64742-54-7	50.00 - 70.00 %
VISCOSITY MODIFIER	Not Assigned	20.00 - 30.00 %
DI-TERT-BUTYL POLYSULFIDE	68937-96-2	1.00 - 5.00 %
WHITE MINERAL OIL	8042-47-5	1.00 - 5.00 %
LUBRICANT ADDITIVE	Not Assigned	1.00 - 5.00 %

**California Prop 65** : Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**The components of this product are reported in the following inventories:**

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian DSL.

AUSTR : On the inventory, or in compliance with the inventory

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- NZIOC : Not in compliance with the inventory
- ENCS : On the inventory, or in compliance with the inventory
- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory

**Inventories**

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

**SECTION 16. OTHER INFORMATION**

**Further information**

Revision Date: 05/23/2015

<b>NFPA:</b>	<b>HMIS III:</b>						
<p>Flammability</p> <p>Health: 1, Flammability: 1, Instability: 0, Special hazard.</p>	<table border="1"> <tr> <td><b>HEALTH</b></td> <td><b>2</b></td> </tr> <tr> <td><b>FLAMMABILITY</b></td> <td><b>1</b></td> </tr> <tr> <td><b>PHYSICAL HAZARD</b></td> <td></td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	<b>HEALTH</b>	<b>2</b>	<b>FLAMMABILITY</b>	<b>1</b>	<b>PHYSICAL HAZARD</b>	
<b>HEALTH</b>	<b>2</b>						
<b>FLAMMABILITY</b>	<b>1</b>						
<b>PHYSICAL HAZARD</b>							

**NFPA Flammable and Combustible Liquids Classification**

Combustible Liquid Class IIIB

**Full text of H-Statements referred to under sections 2 and 3.**

- H227 Combustible liquid.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H401 Toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

Sources of key data used to compile the Safety Data Sheet

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Ashland internal data including own and sponsored test reports  
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists  
BEI : Biological Exposure Index  
CAS : Chemical Abstracts Service (Division of the American Chemical Society).  
CMR : Carcinogenic, Mutagenic or Toxic for Reproduction  
FG : Food grade  
GHS : Globally Harmonized System of Classification and Labeling of Chemicals.  
H-statement : Hazard Statement  
IATA : International Air Transport Association.  
IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization  
ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"  
IMDG : International Maritime Code for Dangerous Goods  
ISO : International Organization for Standardization  
logPow : octanol-water partition coefficient  
LCxx : Lethal Concentration, for xx percent of test population  
LDxx : Lethal Dose, for xx percent of test population.  
ICxx : Inhibitory Concentration for xx of a substance  
Ecxx : Effective Concentration of xx  
N.O.S.: Not Otherwise Specified  
OECD : Organization for Economic Co-operation and Development  
OEL : Occupational Exposure Limit  
P-Statement : Precautionary Statement  
PBT : Persistent , Bioaccumulative and Toxic  
PPE : Personal Protective Equipment  
STEL : Short-term exposure limit  
STOT : Specific Target Organ Toxicity  
TLV : Threshold Limit Value  
TWA : Time-weighted average  
vPvB : Very Persistent and Very Bioaccumulative  
WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act  
DOT : Department of Transportation  
FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act  
HMIRC : Hazardous Materials Information Review Commission  
HMIS : Hazardous Materials Identification System  
NFPA : National Fire Protection Association  
NIOSH : National Institute for Occupational Safety and Health  
OSHA : Occupational Safety and Health Administration  
PMRA : Health Canada Pest Management Regulatory Agency



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RTK : Right to Know  
 WHMIS : Workplace Hazardous Materials Information System

# MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET - Complies with ANSI Z400.1 Draft Standard for the Preparation of Material Safety Data Sheets, Copyright 1991, Chemical Manufacturers Association. May be used to comply with U.S. Department of Labor OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standards must be consulted for specific requirements.

Date : 02/13/2002

## Unocal '76' Guardol 15W/40 Motor Oil

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Unocal Guardol 15W/40

GENERIC NAME: Crankcase Oil

COMPANY IDENTIFICATION

Unocal Refining & Marketing Division  
1201 West 5th Street  
Los Angeles, CA 90017

CHEMICAL FAMILY: Petroleum Hydrocarbon

EMERGENCY / TECHNICAL NUMBERS

(213) 977-7589

CHEMTREC:

(800) 424-9300 (continental U.S.)

(202) 483-7616 (collect in Hawaii & Alaska)

PRODUCT INFORMATION: MSDS Requests and Product Information: (213) 977-7589

SPECIAL NOTES:

### 2. COMPOSITION / INFORMATION INGREDIENTS

<u>COMPONENTS</u>	<u>CAS No.</u>	<u>OSHA Exposure Limits (PEL)</u>	<u>ACGIH Recommended Limits (TLV)</u>	<u>Percent by Weight</u>
Oil Mist (if generated)	8012-95-1	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	n/a
Proprietary Zinc Compound	Proprietary	n/a	n/a	1.000-2.000
Hydrotreated Distillate, Heavy Paraffin	64742-54-7	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	0.0-86.000
Solvent Dewaxed Distillate, Heavy Paraffin	64742-65-0	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	0.0-86.000
Solvent Refined Distillate, Heavy Paraffin	64742-65-0	5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	0.0-3.000
Trade Secret	Proprietary	n/a	n/a	9.000-13.000

COMPOSITION COMMENTS:

None.

### 3. HAZARDS IDENTIFICATION

PRECAUTIONARY WARNING: Used motor oil is a possible skin cancer hazard based on animal data. Liquid or vapor may ignite. Keep away from all sources of ignition. **DO NOT** pressurize, cut, weld, braze, solder, grind, or drill on or near container. "Empty" container retains residue (liquid and/or vapor) and may explode in the heat of a fire.

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE OF ENTRY: Nasal or oral

EYE: This material may cause mild eye irritation. Direct contact with the liquid or exposure to vapors or mists may cause stinging, tearing or redness.

SKIN: This material may cause mild skin irritation. Prolonged or repeated contact or exposure to vapors or mists may cause redness and burning, and drying and cracking of the skin. No harmful effects are expected from skin absorption of this material. Persons with pre-existing skin disorders may be more susceptible to the effects of this material.

INGESTION: While this material has a low degree of toxicity, ingestion of excessive quantities may cause irritation of the digestive tract.

INHALATION: While this material has a low degree of toxicity, breathing high concentrations of vapors or mists may cause irritation of the nose and throat.

CHRONIC EFFECTS: Used motor oil is a possible skin cancer hazard based on tests in laboratory animals and has been identified as a possible carcinogen by IARC.

OTHER NOTES: It is suggested that a source of clean water be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

## 4. FIRST AID MEASURES

### SIGNS AND SYMPTOMS OF EXPOSURE

EYE: Irritation, redness, watering

SKIN: Mild irritation, redness

INGESTION: Irritation to the digestive tract

INHALATION: Irritation to nose and/or throat

FIRST AID PROCEDURES In an emergency, have physician call Los Angeles Poison Control Center (24 hrs.) 1-800-356-3129

EYE: If irritation or redness develops, move victim away from exposure and into fresh air. Flush eyes with clean water. If symptoms persist, seek medical attention.

SKIN: Wipe material from skin and remove contaminated shoes and clothing. Cleanse affected area(s) thoroughly by washing with mild soap and water and, if necessary, a waterless skin cleanser. If irritation or redness develops and persists, seek medical attention.

INGESTION: No first aid is normally required; however, if swallowed, and symptoms develop, seek medical attention.

INHALATION: If respiratory symptoms develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

## 5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES: Flammable

FLASH POINT / METHOD USED: 419 °F (215 °C)

AUTOIGNITION: N/A

FLAMMABILITY LIMITS (% by volume in air):                    LEL: N/A                    UEL: N/A

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide (CO<sub>2</sub>), halon, foam or water spray is recommended

NFPA RATINGS: Health 1; Flammability 1; Reactivity 0.

FIRE FIGHTING INSTRUCTIONS: This material will burn although it is not easily ignited.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS: This material may burn, but will not ignite readily. If container is not properly cooled, it may explode in the heat of a fire. Vapors are heavier than air and may accumulate in low areas.

SPECIAL FIRE FIGHTING PROCEDURES: Wear appropriate protective equipment including respiratory protection as conditions warrant. Stop spill/release if it can be done without risk. Move undamaged containers from fire area if it can be done without risk. Water spray may be useful in minimizing or dispersing vapors and cooling equipment exposed to heat and flame. Avoid spreading burning liquid with water used for cooling purposes.

COMBUSTION PRODUCTS: Combustion may yield major amounts of oxides of carbon and minor amounts of oxides of nitrogen, phosphorous, sulfur and zinc.

## 6. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS: May ignite. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Isolate hazard area and limit entry to authorized personnel. Stop spill/release if it can be done without risk. Wear appropriate protective including respiratory protection as conditions warrant (see Section 3). Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material. Notify fire authorities and appropriate federal, state and local agencies. Immediate cleanup of any spill is recommended. If spill of any amount is made into or upon U.S. navigable waters, the Contiguous Zone, or adjoining shorelines, notify the National Response Center (1-800-424-8802). For highway or railway spills, contact CHEMTREC (1-800-424-9300 ConUS, or 1-202-483-7616 collect in Alaska & Hawaii).

CLEANUP MEASURES: Immediate cleanup of any spill is recommended. Spilled material may be absorbed into an appropriate absorbent material. Dispose of product in accordance with local, county, state, and federal regulations.

## 7. HANDLING AND STORAGE

NORMAL STORAGE: Use and store this material in cool, dry, well ventilated areas away from heat and all sources of ignition. Keep container(s) closed. Store only in approved containers. Keep away from any incompatible materials (see Section 10). Protect container(s) against physical damage. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276. The use of respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 2, 3, & 4).

HANDLING: Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Use good personal hygiene practice. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurized, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition; they may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations. Before working on or in tanks which contain or have contained this product, refer to occupational safety and health administration regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or other contemplated operations.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits (see Section 2), additional ventilation or exhaust systems may be required. Where explosive mixtures may be present, electrical systems safe for such locations must be used.

RESPIRATORY PROTECTION: The use of respiratory protection is advised when concentrations exceed the established exposure limits (see Section 2). Depending on the airborne concentration, use a respirator or gas mask with appropriate cartridges and canisters (NIOSH approved, if available) or supplied air equipment.

EYE AND FACE PROTECTION: Approved eye protection to safeguard against potential eye contact, irritation or injury is recommended.

SKIN AND HAND PROTECTION: The use of gloves impermeable to the specific material handled is advised to prevent skin contact and possible irritation. Impervious clothing should be worn as needed. It is recommended that a source of clean water be available in the work area for flushing eyes and skin.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION: Clear brown liquid

ODOR: Characteristic petroleum

VAPOR PRESSURE (mm Hg): Not determined

BOILING POINT: >555°F / 291°C

VISCOSITY: 109 cSt @ 40°C

SPECIFIC GRAVITY (H<sub>2</sub>O = 1): 0.89 @ 15°C

FLASH POINT: 419°F / 215°C

VAPOR DENSITY (AIR = 1): >1

EVAPORATION RATE (BUTYL ACETATE = 1): <1

SOLUBILITY: Negligible

% VOLATILE: Negligible

## 10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: Extended exposure to high temperatures may cause decomposition.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion may yield major amounts of oxides of carbon and minor amounts of oxides of nitrogen, phosphorous, sulfur and zinc.

HAZARDOUS POLYMERIZATION: Polymerization will not occur.

## 11. TOXICOLOGICAL INFORMATION

CARCINOGENICITY: Used motor oil is a possible skin cancer hazard based on tests in laboratory animals and has been identified as a possible carcinogen by IARC.

IARC MONOGRAPHS: NDA

TERATOGENIC: NDA

NTP: NDA

OSHA REGULATED: NDA

MUTAGENIC: NDA

## 12. ECOLOGICAL INFORMATION

No Data Available.

## 13. DISPOSAL CONSIDERATIONS

Material may be absorbed into an appropriate absorbent material. Dispose of in accordance with all local, county, state, and federal regulations. "Empty" containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurized, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition; they may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged and promptly shipped to the supplier or a drum reconditioner. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

## 14. TRANSPORTATION INFORMATION

NAME OF CONTENTS: N/A

CONSTITUENTS: No hazardous substances at regulated levels

UN/NA NUMBER: NDA

EMERGENCY RESPONSE NUMBER: (800) 424-9300 ConUS or (202) 483-7616 collect in Hawaii & Alaska.

REPORTABLE QUANTITY: NDA

HAZARD CLASS: Not regulated.

POISON INHALATION HAZARD: NDA

## 15. REGULATORY INFORMATION

This product contains a proprietary zinc compound, which is subject to the reporting requirements of SARA 313 and 40 CFR 372.

Originally prepared by: Unocal Refining & Marketing Division, MSDS Coordinator, 7 May 1991.

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or is to be implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this information or the product, the safety of this product, or the hazards related to its use. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assume the risk of his use thereof.

# Safety Data Sheet X-433 AEROSOL

Supersedes Date 10/22/2013

Issuing Date 01/12/2016

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** X-433 AEROSOL  
**Recommended use** Lubricant  
**Information on Manufacturer**  
CERTIFIED LABS, DIV. OF NCH CORP.  
BOX 152170  
IRVING, TEXAS 75015

**Product Code** 5033  
**Chemical nature** Aerosol  
**Emergency Telephone Number**  
CHEMTREC® 800-424-9300  
**Telephone inquiry**  
972-579-2477

## 2. HAZARD IDENTIFICATION

**Color** Gray

**Physical state** liquid

**Odor** Solvent

### GHS

#### Classification

##### Physical Hazards

Flammable Aerosols  
Gases under pressure

Category 2  
Compressed Gas

##### Health Hazard

Aspiration Toxicity  
Specific target organ systemic toxicity (single exposure)  
Specific target organ toxicity (repeated exposure)

Category 1  
Category 3  
Category 2

##### Other hazards

None

#### Labeling

##### Signal Word

**DANGER**



##### Hazard statements

H223 - Flammable aerosol  
H336 - May cause drowsiness or dizziness  
H304 - May be fatal if swallowed and enters airways  
H373 - May cause damage to organs through prolonged or repeated exposure  
H280 - Contains gas under pressure; may explode if heated

##### Precautionary Statements

P210 - Keep away from heat, sparks, open flames or hot surfaces.  
P211 - Do not spray on an open flame or other ignition source  
P251 - Pressurized container: Do not pierce or burn, even after use  
P270 - Do not eat, drink or smoke when using this product.  
P260 - Do not breathe vapors, mist or gas.  
P271 - Use in a well-ventilated area.  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P304 + P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
P312 - Call a physician if unwell.  
P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Call a physician if unwell.  
P410 + P403 - Protect from sunlight. Store in a well-ventilated place  
P412 - Do not expose to temperatures exceeding 50 °C/122 °F  
P501 - Dispose of contents and container in accordance with applicable local regulations.

42 % of the mixture consists of ingredient(s) of unknown toxicity

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Weight % *
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)	64742-52-5	15-40

Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)	64742-53-6	15-40
Petrolatum	8009-03-8	7-13
Sodium sulfonate	68608-26-4	5-10
Isobutane	75-28-5	5-10
Propane	74-98-6	1-5
Polybutene	9003-29-6	1-5
Stoddard solvent	8052-41-3	1-5
Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)	64742-65-0	1-5
Hexylene glycol	107-41-5	1-5
1,2,4- Trimethylbenzene	95-63-6	0.1-1

\*The exact percentage (concentration) of composition has been withheld as a trade secret

#### 4. FIRST AID MEASURES

<b>General advice</b>	Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist, or gas.
<b>Eye Contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. Get medical attention if irritation develops and persists.
<b>Skin Contact</b>	Wash off with soap and plenty of water. Get medical attention if irritation develops and persists.
<b>Inhalation</b>	Move to fresh air. In case of shortness of breath, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
<b>Ingestion</b>	Drink 1 or 2 glasses of water. Do NOT induce vomiting. Get medical attention immediately. Never give anything by mouth to an unconscious person.
<b>Notes to physician</b>	Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

#### 5. FIRE-FIGHTING MEASURES

<b>Flash Point</b> 201.2 °F / 94 °C	<b>Method</b> Seta closed cup
<b>Flammability Limits in Air %:</b> Mixture.	<b>Upper:</b> 9.5 <b>Lower:</b> 0.9
<b>Suitable Extinguishing Media</b>	
Foam. Alcohol-resistant foam. Carbon dioxide (CO <sub>2</sub> ). Water spray. Dry powder. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
<b>Specific hazards arising from the chemical</b>	
Material can create slippery conditions. Flame extension: 9.8 inches / 25 cm and Burnback: 0 inch / 0 cm.	
<b>Protective Equipment and Precautions for Firefighters</b>	
As in any fire, wear self-contained breathing apparatus pressure-demand, NOHSC (approved or equivalent) and full protective gear.	
<b>Aerosol Level (NFPA 30B) -</b>	3
<b>NFPA</b>	<b>Health</b> 2 <b>Flammability</b> 4 <b>Instability</b> 0
<b>HMIS</b>	<b>Health</b> 2 <b>Flammability</b> 4 <b>Instability</b> 0

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. Material can create slippery conditions.
<b>Environmental Precautions</b>	Do not flush into surface water or sanitary sewer system.
<b>Methods for Containment</b>	Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
<b>Methods for Cleaning Up</b>	Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.
<b>Neutralizing Agent</b>	Not applicable.

#### 7. HANDLING AND STORAGE

<b>Handling</b>	Ensure adequate ventilation. Keep away from heat and sources of ignition. Avoid contact with skin, eyes and clothing. Avoid breathing vapors, mist or gas. Wear personal protective equipment.
<b>Storage</b>	Store in original container. Keep in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.
<b>Storage Temperature</b>	<b>Minimum</b> 35 °F / 2 °C <b>Maximum</b> 120 °F / 49 °C
<b>Storage Conditions</b>	<b>Indoor</b> X <b>Outdoor</b> <b>Heated</b> <b>Refrigerated</b>

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

##### Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)	TWA: 5 mg/m <sup>3</sup> ; STEL: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	No data available
Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)	5 mg/m <sup>3</sup> as oil mist	10 mg/m <sup>3</sup> as oil mist	No data available
Petrolatum	5 mg/m <sup>3</sup> as oil mist	10 mg/m <sup>3</sup> as oil mist	No data available
Isobutane	STEL: 1000 ppm	No data available	TWA: 800 ppm TWA: 1900 mg/m <sup>3</sup>
Propane	TWA: 1000 ppm	TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>	2100 ppm TWA: 1000 ppm TWA: 1800 mg/m <sup>3</sup>
Polybutene	5 mg/m <sup>3</sup> as oil mist	10 mg/m <sup>3</sup> as oil mist	No data available
Stoddard solvent	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m <sup>3</sup>	20000 mg/m <sup>3</sup> Ceiling: 1800 mg/m <sup>3</sup> TWA: 350 mg/m <sup>3</sup>
Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	No data available
Hexylene glycol	Ceiling: 25 ppm	No data available	Ceiling: 25 ppm Ceiling: 125 mg/m <sup>3</sup>
1,2,4- Trimethylbenzene	TWA: 25 ppm	No data available	TWA: 25 ppm TWA: 125 mg/m <sup>3</sup>

**Engineering Measures** Ensure adequate ventilation, especially in confined areas. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

#### Personal Protective Equipment

##### Eye/Face Protection

Safety glasses with side-shields.

##### Skin Protection

Wear suitable protective clothing, Impervious gloves.

##### Respiratory Protection

In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

#### General Hygiene Considerations

Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use. Wear protective gloves/clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	liquid	<b>Viscosity</b>	Slight viscous
<b>Color</b>	Gray	<b>Odor</b>	Solvent
<b>Odor Threshold</b>	Not applicable	<b>Appearance</b>	Opaque
<b>pH</b>	Not applicable	<b>Specific Gravity</b>	0.857
<b>Evaporation Rate</b>	18.85 (Butyl acetate=1)	<b>Percent Volatile (Volume)</b>	23.7
<b>VOC Content (%)</b>	17.2	<b>VOC Content (g/L)</b>	147.4
<b>Vapor Pressure</b>	1762.54 mmHg @ 70°F	<b>Vapor Density</b>	1.4 (Air = 1.0)
<b>Solubility</b>	Negligible	<b>n-Octanol/Water Partition</b>	No data available
<b>Melting Point/Range</b>	No data available	<b>Decomposition Temperature</b>	No data available
<b>Boiling Point/Range</b>	No data available	<b>Flammability (solid, gas)</b>	No data available
<b>Flash Point</b>	201.2 °F / 94 °C	<b>Method</b>	Seta closed cup
<b>Autoignition Temperature</b>	No information available.		
<b>Flammability Limits in Air %:</b>	Mixture	<b>Upper: 9.5 Lower: 0.9</b>	

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable. Hazardous polymerization does not occur.
<b>Conditions to Avoid</b>	Keep away from open flames, hot surfaces, and sources of ignition.
<b>Incompatible Products</b>	Strong oxidizing agents, Strong acids, Aldehydes, Ketones.
<b>Decomposition Temperature</b>	No data available
<b>Hazardous Decomposition Products</b>	Carbon oxides, Nitrogen oxides (NOx), Sulfur oxides, Aldehydes, Ketones.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.

## 11. TOXICOLOGICAL INFORMATION

Product Information No information available.

The following values are calculated based on chapter 3.1 of the GHS document

<b>Oral LD50</b>	4,960.48
<b>Dermal LD50</b>	2,214.25
<b>Inhalation LC50</b>	
<b>Gas</b>	No information available
<b>Mist</b>	No information available



<b>Vapor</b>	No information available
<b>Principle Route of Exposure</b>	Inhalation, Skin contact, Eye contact, Ingestion.
<b>Primary Routes of Entry</b>	Inhalation, Eye contact, Skin contact, Ingestion.
<b>Acute Effects:</b>	
<b>Eyes</b>	Low hazard for usual industrial or commercial handling.
<b>Skin</b>	Low hazard for usual industrial or commercial handling.
<b>Inhalation</b>	May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Causes headache, drowsiness or other effects to the central nervous system. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.
<b>Chronic Toxicity</b>	Repeated or prolonged exposure may cause central nervous system damage. Kidney injury may occur.
<b>Target Organ Effects</b>	Central nervous system, Heart, Liver, Kidney, Blood, Respiratory system, Immune system.
<b>Aggravated Medical Conditions</b>	Respiratory disorders, Neurological disorders, Skin disorders, Kidney disorders, Blood disorders.

## Component Information

## Acute Toxicity

Component	Oral LD50	Dermal LD50	Inhalation LC50	Draize Test	Other
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable) 64742-52-5	> 5000 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	no data available	no data available	no data available
Petrolatum 8009-03-8	no data available	= 3600 mg/kg ( Rabbit )	no data available	no data available	no data available
Isobutane 75-28-5	no data available	no data available	= 658 mg/L ( Rat ) 4 h	no data available	no data available
Propane 74-98-6	no data available	no data available	= 658 mg/L ( Rat ) 4 h	no data available	no data available
Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable) 64742-65-0	>5000 mg/kg ( rat )	>5000 mg/kg ( rabbit )	no data available	no data available	no data available
Hexylene glycol 107-41-5	= 3692 mg/kg ( Rat )	no data available	> 310 mg/m <sup>3</sup> ( Rat ) 1 h	no data available	no data available
1,2,4- Trimethylbenzene 95-63-6	= 3280 mg/kg ( Rat )	> 3160 mg/kg ( Rabbit )	= 18 g/m <sup>3</sup> ( Rat ) 4 h	no data available	no data available

## Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
Isobutane 75-28-5	no data available	no data available	no data available	no data available	Central nervous system
Propane 74-98-6	no data available	no data available	no data available	no data available	Central nervous system
Stoddard solvent 8052-41-3	no data available	no data available	no data available	no data available	Skin Central nervous system Eyes Respiratory system Kidney
Hexylene glycol 107-41-5	no data available	no data available	no data available	no data available	Skin Central nervous system Eyes Respiratory system
1,2,4- Trimethylbenzene 95-63-6	no data available	no data available	no data available	no data available	Blood Skin Central nervous system Eyes Respiratory system

## Carcinogenicity

There are no known carcinogenic chemicals in this product.

## 12. ECOLOGICAL INFORMATION

## Product Information

No information available.

## Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Crustacea	log Pow
Petroleum distillates, hydrotreated heavy naphthenic (<3% DMSO extractable)	No information available.	LC50 > 5000 mg/L Oncorhynchus mykiss 96 h	No information available	1000: 48 h Daphnia magna mg/L EC50	N/A
Petroleum distillates, hydrotreated light naphthenic (<3% DMSO extractable)	No information available.	LC50 > 5000 mg/L Oncorhynchus mykiss 96 h	No information available	1000: 48 h Daphnia magna mg/L EC50	N/A
Isobutane	No information available.	No information available.	No information available	No information available.	2.88
Propane	No information available.	No information available.	No information available	No information available.	2.3
Petroleum distillates, solvent dewaxed heavy paraffinic (<3% DMSO extractable)	No information available.	LC50 > 5000 mg/L Oncorhynchus mykiss 96 h	No information available	1000: 48 h Daphnia magna mg/L EC50	N/A

Hexylene glycol	No information available.	LC50 10500 - 11000 mg/L Pimephales promelas 96 h LC50 = 10000 mg/L Lepomis macrochirus 96 h LC50 = 8690 mg/L Pimephales promelas 96 h LC50 = 10700 mg/L Pimephales promelas 96 h	EC50 = 3038 mg/L 5 min	2700 - 3700: 48 h Daphnia magna mg/L EC50	0.13986
1,2,4- Trimethylbenzene	No information available.	LC50 7.19 - 8.28 mg/L Pimephales promelas 96 h LC50 = 7.72 mg/L Pimephales promelas 96 h	No information available	6.14: 48 h Daphnia magna mg/L EC50	3.63

**Persistence and Degradability**

No information available.

**Bioaccumulation**

No information available.

**Mobility**

No information available.

### 13. DISPOSAL CONSIDERATIONS

**Product Disposal**

Dispose of in accordance with local regulations.

**Container Disposal**

Contents under pressure. Do not puncture. Empty remaining contents. Empty containers should be taken for local recycling, recovery, or waste disposal.

### 14. TRANSPORT INFORMATION

**DOT****Proper Shipping Name**

Consumer commodity

**Hazard Class**

ORM-D

**Description**

Consumer commodity,ORM-D

**TDG****Proper shipping name**

Aerosols

**Hazard Class**

2.1

**UN-No**

UN1950

**Description**

UN1950, AEROSOLS,2.1, LTD QTY

**ICAO****UN-No**

UN1950

**Proper Shipping Name**

Aerosols

**Hazard Class**

2.1

**Shipping Description**

UN1950, AEROSOLS, FLAMMABLE 2.1 LTD QTY

**IATA****UN-No**

UN1950

**Proper Shipping Name**

Aerosols, flammable

**Hazard Class**

2.1

**ERG-Code**

10L

**Shipping Description**

UN1950,AEROSOLS, FLAMMABLE ,2.1 LTD QTY

**IMDG/IMO****Proper Shipping Name**

Aerosols

**Hazard Class**

2

**UN-No**

UN1950

**EmS No.**

F-D, S-U

**Description**

UN1950, AEROSOLS, ,2.1, LTD QTY

### 15. REGULATORY INFORMATION

**Inventories****TSCA**

Complies

**DSL**

Complies

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Component	CAS No.	Weight % *	SARA 313 - Threshold Values
1,2,4- Trimethylbenzene	95-63-6	0.1-1	1.0

**SARA 311/312 Hazardous Categorization**

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	Yes	Yes	No

CERCLA

#### 16. OTHER INFORMATION

**Prepared By** Laura Strauss  
**Supersedes Date** 10/22/2013  
**Issuing Date** 01/12/2016  
**Reason for Revision** No information available.  
**Glossary** No information available.  
**List of References.** No information available.

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