

Material Name: Diesel Fuel, All Types

SDS No. 9909 US GHS

Synonyms: Ultra Low Sulfur Diesel; Low Sulfur Diesel; No. 2 Diesel; Motor Vehicle Diesel Fuel; Non-

Road Diesel Fuel; Locomotive/Marine Diesel Fuel

Section 1 - Product and Company Identification

Manufacturer Information

Hess Corporation 1 Hess Plaza Woodbridge, NJ 07095-0961 Phone: 732-750-6000 Corporate EHS Emergency #800-424-9300 CHEMTREC

www.hess.com (Environment, Health, Safety Internet Website)

Section 2 - Hazards Identification

GHS Classification:

Flammable Liquids - Category 3

Skin Corrosion/Irritation - Category 2

Germ Cell Mutagenicity - Category 2

Carcinogenicity - Category 2

Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)

Aspiration Hazard - Category 1

Hazardous to the Aquatic Environment, Acute Hazard – Category 3

GHS LABEL ELEMENTS

Symbol(s)







Signal Word

DANGER

Hazard Statements

Flammable liquid and vapor.

Causes skin irritation.

Suspected of causing genetic defects.

Suspected of causing cancer.

May cause respiratory irritation.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Harmful to aquatic life.

Precautionary Statements

Prevention

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

Keep container tightly closed.

Ground/bond container and receiving equipment.

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Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands and forearms thoroughly after handling.

Obtain special instructions before use.

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

Avoid breathing fume/mist/vapours/spray.

Response

In case of fire: Use water spray, fog or foam to extinguish.

IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.

If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting.

IF exposed or concerned: Get medical advice/attention.

Storage

Store in a well-ventilated place. Keep cool.

Keep container tightly closed.

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS#	Component	Percent
68476-34-6	Fuels, diesel, no. 2	100
91-20-3	Naphthalene	<0.1

A complex mixture of hydrocarbons with carbon numbers in the range C9 and higher.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and the area of the body burned.

First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

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First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

* * * Section 5 - Fire Fighting Measures

General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, and other gaseous agents.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand selfcontained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

Section 6 - Accidental Release Measures

Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

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Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Prevention of Secondary Hazards

None

Section 7 - Handling and Storage

Handling Procedures

Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

Incompatibilities

Keep away from strong oxidizers.

Section 8 - Exposure Controls / Personal Protection

Component Exposure Limits

Fuels, diesel, no. 2 (68476-34-6)

100 mg/m3 TWA (inhalable fraction and vapor, as total hydrocarbons, listed under Diesel fuel) Skin - potential significant contribution to overall exposure by the cutaneous route (listed under Diesel fuel)

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Naphthalene (91-20-3)

ACGIH: 10 ppm TWA 15 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 10 ppm TWA; 50 mg/m3 TWA NIOSH: 10 ppm TWA; 50 mg/m3 TWA 15 ppm STEL; 75 mg/m3 STEL

Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

Section 9 - Physical & Chemical Properties

Appearance: Clear, straw-yellow. Odor: Mild, petroleum distillate odor

Physical State: Liquid pH: ND **Vapor Pressure:** 0.009 psia @ 70 °F (21 °C) Vapor Density: >1.0 **Boiling Point:** 320 to 690 °F (160 to 366 °C) Melting Point: ND

Solubility (H2O): Negligible **Specific Gravity:** 0.83-0.876 @ 60°F (16°C)

Evaporation Rate: Slow; varies with conditions VOC: Octanol/H2O Coeff.: Percent Volatile: 100% ND Flash Point: >125 °F (>52 °C) minimum Flash Point Method: PMCC

Lower Flammability Limit 0.6 **Upper Flammability Limit** 7.5 (UFL):

(LFL):

Burning Rate: ND Auto Ignition: 494°F (257°C)

Section 10 - Chemical Stability & Reactivity Information

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

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Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

Incompatible Products

Keep away from strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

Section 11 - Toxicological Information

Acute Toxicity

A: General Product Information

Harmful if swallowed.

B: Component Analysis - LD50/LC50

Naphthalene (91-20-3)

Inhalation LC50 Rat >340 mg/m3 1 h; Oral LD50 Rat 490 mg/kg; Dermal LD50 Rat >2500 mg/kg; Dermal LD50 Rabbit >20 g/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Contact with eyes may cause mild irritation.

Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

This material has been positive in a mutagenicity study.

Carcinogenicity

A: General Product Information

Suspected of causing cancer.

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Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

B: Component Carcinogenicity

Fuels, diesel, no. 2 (68476-34-6)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans (listed under Diesel

fuel)

Naphthalene (91-20-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

NTP: Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)

IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ general toxicity single exposure effects.

Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ general toxicity repeat exposure effects.

Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Section 12 - Ecological Information

Ecotoxicity

A: General Product Information

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Fuels, diesel, no. 2 (68476-34-6)

96 Hr LC50 Oncorhynchus mykiss

96 Hr LC50 Oncorhynchus mykiss

Conditions Test & Species

96 Hr LC50 Pimephales promelas 35 mg/L [flowthrough]

Naphthalene (91-20-3)

Test & Species Conditions

96 Hr LC50 Pimephales promelas 5.74-6.44 mg/L

> [flow-through] 1.6 mg/L [flow-

through]

0.91-2.82 mg/L [static]

96 Hr LC50 Pimephales promelas 1.99 mg/L [static]

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96 Hr LC50 Lepomis macrochirus 31.0265 mg/L

[static]

72 Hr EC50 Skeletonema costatum
48 Hr LC50 Daphnia magna
2.16 mg/L
48 Hr EC50 Daphnia magna
1.96 mg/L [Flow

through]

48 Hr EC50 Daphnia magna 1.09 - 3.4 mg/L

[Static]

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility in Soil

No information available.

* * Section 13 - Disposal Considerations * * *

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 14 - Transportation Information * * *

DOT Information

Shipping Name: Diesel Fuel

NA #: 1993 Hazard Class: 3 Packing Group: III

Placard:



* * * Section 15 - Regulatory Information * * *

Regulatory Information

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Naphthalene (91-20-3)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

SARA Section 311/312 - Hazard Classes

Acute Health Chronic Health Fire Sudden Release of Pressure Reactive
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SARA SECTION 313 - SUPPLIER NOTIFICATION

This product may contain listed chemicals below the de minimis levels which therefore are not subject to the supplier notification requirements of Section 313 of the Emergency Planning and Community Right- To-Know Act (EPCRA) of 1986 and of 40 CFR 372. If you may be required to report releases of chemicals listed in 40 CFR 372.28, you may contact Hess Corporate Safety if you require additional information regarding this product.

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Fuels, diesel, no. 2	68476-34-6	No	No	No	Yes	No	No
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

Additional Regulatory Information

Component Analysis - Inventory

Component	CAS#	TSCA	CAN	EEC
Fuels, diesel, no. 2	68476-34-6	Yes	DSL	EINECS
Naphthalene	91-20-3	Yes	DSL	EINECS

Section 16 - Other Information

NFPA® Hazard Rating

1 Health 2 Fire

Reactivity



HMIS® Hazard Rating

Health

Slight

Fire

2 Moderate

Minimal Physical

*Chronic

Material Name: Diesel Fuel, All Types SDS No. 9909

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

Literature References

None

Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet



Material Name: Gasoline All Grades

SDS No. 9950

US GHS

Synonyms: Hess Conventional (Oxygenated and Non-oxygenated) Gasoline; Reformulated Gasoline (RFG); Reformulated Gasoline Blendstock for Oxygenate Blending (RBOB); Unleaded Motor or Automotive Gasoline

* * * Section 1 - Product and Company Identification * * *

Manufacturer Information

Hess Corporation 1 Hess Plaza Woodbridge, NJ 07095-0961 Phone: 732-750-6000 Corporate EHS Emergency # 800-424-9300 CHEMTREC

www.hess.com (Environment, Health, Safety Internet Website)

* * * Section 2 - Hazards Identification * * *

GHS Classification:

Flammable Liquid - Category 2

Skin Corrosion/Irritation - Category 2

Germ Cell Mutagenicity - Category 1B

Carcinogenicity - Category 1B

Toxic to Reproduction - Category 1A

Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)

Specific Target Organ Toxicity (Repeat Exposure) - Category 1 (liver, kidneys, bladder, blood, bone marrow, nervous system)

Aspiration Hazard - Category 1

Hazardous to the Aquatic Environment – Acute Hazard - Category 3

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

DANGER

Hazard Statements

Highly flammable liquid and vapour.

Causes skin irritation.

May cause genetic defects.

May cause cancer.

May damage fertility or the unborn child.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Causes damage to organs (liver, kidneys, bladder, blood, bone marrow, nervous system) through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

Harmful to aquatic life.

Material Name: Gasoline All Grades SDS No. 9950

Precautionary Statements

Prevention

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.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands and forearms thoroughly after handling.

Obtain special instructions before use.

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

Do not breathe mist/vapours/spray.

Use only outdoors or in well-ventilated area.

Do not eat, drink or smoke when using this product.

Avoid release to the environment.

Response

In case of fire: Use water spray, fog, dry chemical fire extinguishers or hand held fire extinguisher.

IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

IF exposed or concerned: Get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.

Get medical advice/attention if you feel unwell.

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

Storage

Store in a well-ventilated place.

Keep cool. Keep container tightly closed.

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS#	Component	Percent
86290-81-5	Gasoline, motor fuel	100
108-88-3	Toluene	1-25
106-97-8	Butane	<10
1330-20-7	Xylenes (o-, m-, p- isomers)	1-15
95-63-6	Benzene, 1,2,4-trimethyl-	<6
64-17-5	Ethyl alcohol	0-10
100-41-4	Ethylbenzene	<3
71-43-2	Benzene	0.1-4.9

Material Name: Gasoline All Grades SDS No. 9950

110-54-3 Hexane 0.5-4	Į.
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A complex blend of petroleum-derived normal and branched-chain alkane, cycloalkane, alkene, and aromatic hydrocarbons. May contain antioxidant and multifunctional additives. Non-oxygenated Conventional Gasoline and RBOB do not have oxygenates (Ethanol). Oxygenated Conventional and Reformulated Gasoline will have oxygenates for octane enhancement or as legally required.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops.

First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. Flowing product may be ignited by self-generated static electricity. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, or gaseous extinguishing agent.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Firefighting foam suitable for polar solvents is recommended for fuel with greater than 10% oxygenate concentration.

Unsuitable Extinguishing Media

None

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Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Prevention of Secondary Hazards

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

USE ONLY AS A MOTOR FUEL. DO NOT SIPHON BY MOUTH

Handle as a flammable liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Material Name: Gasoline All Grades

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Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

Incompatibilities

Keep away from strong oxidizers.

Section 8 - Exposure Controls / Personal Protection

Component Exposure Limits

Gasoline, motor fuel (86290-81-5)

ACGIH: 300 ppm TWA 500 ppm STEL

Toluene (108-88-3)

ACGIH: 20 ppm TWA

OSHA: 200 ppm TWA; 375 mg/m3 TWA

150 ppm STEL; 560 mg/m3 STEL

NIOSH: 100 ppm TWA; 375 mg/m3 TWA

150 ppm STEL; 560 mg/m3 STEL

Butane (106-97-8)

ACGIH: 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4)

OSHA: 800 ppm TWA; 1900 mg/m3 TWA NIOSH: 800 ppm TWA; 1900 mg/m3 TWA

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: 100 ppm TWA

150 ppm STEL

OSHA: 100 ppm TWA; 435 mg/m3 TWA

150 ppm STEL; 655 mg/m3 STEL

Benzene, 1,2,4-trimethyl- (95-63-6)

NIOSH: 25 ppm TWA; 125 mg/m3 TWA

Ethyl alcohol (64-17-5)

ACGIH: 1000 ppm STEL

OSHA: 1000 ppm TWA; 1900 mg/m3 TWA NIOSH: 1000 ppm TWA; 1900 mg/m3 TWA

Material Name: Gasoline All Grades SDS No. 9950

Ethylbenzene (100-41-4)

ACGIH: 20 ppm TWA

OSHA: 100 ppm TWA; 435 mg/m3 TWA

125 ppm STEL; 545 mg/m3 STEL

NIOSH: 100 ppm TWA; 435 mg/m3 TWA

125 ppm STEL; 545 mg/m3 STEL

Benzene (71-43-2)

ACGIH: 0.5 ppm TWA

2.5 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action

Level; 1 ppm TWA

NIOSH: 0.1 ppm TWA

1 ppm STEL

Hexane (110-54-3)

ACGIH: 50 ppm TWA

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 500 ppm TWA; 1800 mg/m3 TWA NIOSH: 50 ppm TWA; 180 mg/m3 TWA

Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

Material Name: Gasoline All Grades SDS No. 9950

* * * Section 9 - Physical & Chemical Properties * * *

Appearance: Translucent, straw-colored or Odor: Strong, characteristic aromatic

light yellow hydrocarbon odor. Sweet-ether

like

Physical State: Liquid pH: ND

Vapor Pressure:6.4 - 15 RVP @ 100 °F (38 °C)Vapor Density:AP 3-4

(275-475 mm Hg @ 68 °F (20

°C)

Boiling Point:85-437 °F (39-200 °C)Melting Point:NDSolubility (H2O):Negligible to SlightSpecific Gravity:0.70-0.78

Evaporation Rate:10-11VOC:NDPercent Volatile:100%Octanol/H2O Coeff.:NDFlash Point:-45 °F (-43 °C)Flash Point Method:PMCCUpper Flammability Limit7.6%Lower Flammability Limit1.4%

(UFL): (LFL):

Burning Rate: ND Auto Ignition: >530°F (>280°C)

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

Incompatible Products

Keep away from strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

A: General Product Information

Harmful if swallowed.

B: Component Analysis - LD50/LC50

Gasoline, motor fuel (86290-81-5)

Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat 14000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Toluene (108-88-3)

Inhalation LC50 Rat 12.5 mg/L 4 h; Inhalation LC50 Rat >26700 ppm 1 h; Oral LD50 Rat 636 mg/kg; Dermal LD50 Rabbit 8390 mg/kg; Dermal LD50 Rat 12124 mg/kg

Butane (106-97-8)

Inhalation LC50 Rat 658 mg/L 4 h

Material Name: Gasoline All Grades SDS No. 9950

Xylenes (o-, m-, p- isomers) (1330-20-7)

Inhalation LC50 Rat 5000 ppm 4 h; Inhalation LC50 Rat 47635 mg/L 4 h; Oral LD50 Rat 4300 mg/kg; Dermal LD50 Rabbit >1700 mg/kg

Benzene, 1,2,4-trimethyl- (95-63-6)

Inhalation LC50 Rat 18 g/m3 4 h; Oral LD50 Rat 3400 mg/kg; Dermal LD50 Rabbit >3160 mg/kg

Ethyl alcohol (64-17-5)

Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h

Ethylbenzene (100-41-4)

Inhalation LC50 Rat 17.2 mg/L 4 h; Oral LD50 Rat 3500 mg/kg; Dermal LD50 Rabbit 15354 mg/kg

Benzene (71-43-2)

Inhalation LC50 Rat 13050-14380 ppm 4 h; Oral LD50 Rat 1800 mg/kg

Hexane (110-54-3)

Inhalation LC50 Rat 48000 ppm 4 h; Oral LD50 Rat 25 g/kg; Dermal LD50 Rabbit 3000 mg/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Moderate irritant. Contact with liquid or vapor may cause irritation.

Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

This product may cause genetic defects.

Carcinogenicity

A: General Product Information

May cause cancer.

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Material Name: Gasoline All Grades

SDS No. 9950

IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain.

This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

B: Component Carcinogenicity

Gasoline, motor fuel (86290-81-5)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

Toluene (108-88-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Ethyl alcohol (64-17-5)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic

beverages) (Group 1 (carcinogenic to humans))

Ethylbenzene (100-41-4)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans IARC: Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans))

Benzene (71-43-2)

ACGIH: A1 - Confirmed Human Carcinogen

OSHA: 5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action

Level; 1 ppm TWA

NIOSH: potential occupational carcinogen

NTP: Known Human Carcinogen (Select Carcinogen)

IARC: Monograph 100F [in preparation]; Supplement 7 [1987]; Monograph 29 [1982] (Group 1

(carcinogenic to humans))

Reproductive Toxicity

This product is suspected of damaging fertility or the unborn child.

Specified Target Organ General Toxicity: Single Exposure

This product may cause drowsiness or dizziness.

Material Name: Gasoline All Grades SDS No. 9950

Specified Target Organ General Toxicity: Repeated Exposure

This product causes damage to organs through prolonged or repeated exposure.

Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

Very toxic to aquatic life with long lasting effects. Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Gasoline, motor fuel (86290-81-5)

Test & Species		Conditions
96 Hr LC50 Alburnus alburnus	119 mg/L [static]	
96 Hr LC50 Cyprinodon variegatus	82 mg/L [static]	
72 Hr EC50 Pseudokirchneriella	56 mg/L	
subcapitata		
24 Hr EC50 Daphnia magna	170 mg/L	

Toluene (108-88-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	15.22-19.05 mg/L [flow-through]	1 day old
96 Hr LC50 Pimephales promelas	12.6 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	5.89-7.81 mg/L [flow-through]	
96 Hr LC50 Oncorhynchus mykiss	14.1-17.16 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	5.8 mg/L [semi- static]	
96 Hr LC50 Lepomis macrochirus	11.0-15.0 mg/L [static]	
96 Hr LC50 Oryzias latipes	54 mg/L [static]	
96 Hr LC50 Poecilia reticulata	28.2 mg/L [semi- static]	
96 Hr LC50 Poecilia reticulata	50.87-70.34 mg/L [static]	
96 Hr EC50 Pseudokirchneriella subcapitata	>433 mg/L	
72 Hr EC50 Pseudokirchneriella subcapitata	12.5 mg/L [static]	
48 Hr EC50 Daphnia magna	5.46 - 9.83 mg/L [Static]	
48 Hr EC50 Daphnia magna	11.5 mg/L	
Xvlenes (o-, m-, n- isomers) (1330-20-7	7)	

Xylenes (o-, m-, p- isomers) (1330-20-7)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	13.4 mg/L [flow-through]	

Conditions

Material Name: Gasoline All Grades

SDS No. 9950

96 Hr LC50 Oncorhynchus mykiss	2.661-4.093 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	13.5-17.3 mg/L
96 Hr LC50 Lepomis macrochirus	13.1-16.5 mg/L [flow-through]
96 Hr LC50 Lepomis macrochirus	19 mg/L
96 Hr LC50 Lepomis macrochirus	7.711-9.591 mg/L [static]
96 Hr LC50 Pimephales promelas	23.53-29.97 mg/L [static]
96 Hr LC50 Cyprinus carpio	780 mg/L [semistatic]
96 Hr LC50 Cyprinus carpio	>780 mg/L
96 Hr LC50 Poecilia reticulata	30.26-40.75 mg/L [static]
48 Hr EC50 water flea	3.82 mg/L
48 Hr LC50 Gammarus lacustris	0.6 mg/L

Benzene, 1,2,4-trimethyl- (95-63-6)

Tost &	Species		
ieSια	Species		

96 Hr LC50 Pimephales promelas	7.19-8.28 mg/L
49 Ur ECEO Donbaio magas	[flow-through]
48 Hr EC50 Daphnia magna	6.14 mg/L

Ethyl alcohol (64-17-5)

Test & Species96 Hr LC50 Oncorhynchus mykiss 12.0 - 16.0 mL/L

	[static]
96 Hr LC50 Pimephales promelas	>100 mg/L [static]
96 Hr LC50 Pimephales promelas	13400 - 15100 mg/L
	[flow-through]
48 Hr LC50 Daphnia magna	9268 - 14221 mg/L
24 Hr EC50 Daphnia magna	10800 mg/L
48 Hr EC50 Daphnia magna	2 mg/L [Static]

Ethylbenzene (100-41-4)

Test & Species Conditions

i est a species		Condition
96 Hr LC50 Oncorhynchus mykiss	11.0-18.0 mg/L [static]	
96 Hr LC50 Oncorhynchus mykiss	4.2 mg/L [semi- static]	
96 Hr LC50 Pimephales promelas	7.55-11 mg/L [flow-through]	
96 Hr LC50 Lepomis macrochirus	32 mg/L [static]	
96 Hr LC50 Pimephales promelas	9.1-15.6 mg/L [static]	
96 Hr LC50 Poecilia reticulata	9.6 mg/L [static]	
72 Hr EC50 Pseudokirchneriella subcapitata	4.6 mg/L	
96 Hr EC50 Pseudokirchneriella subcapitata	>438 mg/L	
72 Hr EC50 Pseudokirchneriella subcapitata	2.6 - 11.3 mg/L [static]	

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Material Name: Gasoline All Grades

SDS No. 9950

96 Hr EC50 Pseudokirchneriella 1.7 - 7.6 mg/L subcapitata [static] 48 Hr EC50 Daphnia magna 1.8 - 2.4 mg/L

Benzene (71-43-2)

Conditions Test & Species

96 Hr LC50 Pimephales promelas 10.7-14.7 mg/L [flow-through] 5.3 mg/L [flow-96 Hr LC50 Oncorhynchus mykiss through] 96 Hr LC50 Lepomis macrochirus 22.49 mg/L [static]

96 Hr LC50 Poecilia reticulata 28.6 mg/L [static] 96 Hr LC50 Pimephales promelas 22330-41160 µg/L [static]

96 Hr LC50 Lepomis macrochirus 70000-142000 µg/L

[static] 72 Hr EC50 Pseudokirchneriella 29 mg/L

subcapitata

8.76 - 15.6 mg/L 48 Hr EC50 Daphnia magna

[Static] 10 mg/L

Hexane (110-54-3)

48 Hr EC50 Daphnia magna

Test & Species Conditions

96 Hr LC50 Pimephales promelas 2.1-2.98 mg/L [flow-

through]

24 Hr EC50 Daphnia magna >1000 mg/L

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility in Soil

No information available.

Section 13 - Disposal Considerations

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

Material Name: Gasoline All Grades **SDS No. 9950**

Section 14 - Transportation Information

Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS#	
Gasoline, motor fuel	86290-81-5	DOT regulated marine pollutant

DOT Information

Shipping Name: Gasoline

UN #: 1203 Hazard Class: 3 Packing Group: II

Placard:



Section 15 - Regulatory Information

Regulatory Information

A: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Toluene (108-88-3)

SARA 313: 1.0 % de minimis concentration CERCLA: 1000 lb final RQ; 454 kg final RQ

Xylenes (o-, m-, p- isomers) (1330-20-7)

SARA 313: 1.0 % de minimis concentration CERCLA: 100 lb final RQ; 45.4 kg final RQ

Benzene, 1,2,4-trimethyl- (95-63-6)

SARA 313: 1.0 % de minimis concentration

Ethylbenzene (100-41-4)

SARA 313: 0.1 % de minimis concentration CERCLA: 1000 lb final RQ; 454 kg final RQ

Benzene (71-43-2)

SARA 313: 0.1 % de minimis concentration

CERCLA: 10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an

August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on

potential carcinogenicity in an August 14, 1989 final rule)

Material Name: Gasoline All Grades

SDS No. 9950

Hexane (110-54-3)

SARA 313: 1.0 % de minimis concentration CERCLA: 5000 lb final RQ; 2270 kg final RQ

SARA Section 311/312 - Hazard Classes

Acute Health Chronic Health Sudden Release of Pressure <u>Fire</u> Reactive Χ

Component Marine Pollutants

This material contains one or more of the following chemicals required by US DOT to be identified as marine pollutants.

Component	CAS#	
Gasoline, motor fuel	86290-81-5	DOT regulated marine pollutant

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Gasoline, motor fuel	86290-81-5	No	No	No	No	Yes	No
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes	No
Butane	106-97-8	Yes	Yes	Yes	Yes	Yes	No
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	Yes	Yes	Yes	Yes	No
Benzene, 1,2,4-trimethyl-	95-63-6	No	Yes	Yes	Yes	Yes	No
Ethyl alcohol	64-17-5	Yes	Yes	Yes	Yes	Yes	No
Ethylbenzene	100-41-4	Yes	Yes	Yes	Yes	Yes	No
Benzene	71-43-2	Yes	Yes	Yes	Yes	Yes	No
Hexane	110-54-3	No	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Material Name: Gasoline All Grades

SDS No. 9950

Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS#	Minimum Concentration
Toluene	108-88-3	1 %
Butane	106-97-8	1 %
Benzene, 1,2,4-trimethyl-	95-63-6	0.1 %
Ethyl alcohol	64-17-5	0.1 %
Ethylbenzene	100-41-4	0.1 %
Benzene	71-43-2	0.1 %
Hexane	110-54-3	1 %

Additional Regulatory Information

Component Analysis - Inventory

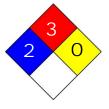
Component	CAS#	TSCA	CAN	EEC
Gasoline, motor fuel	86290-81-5	No	DSL	EINECS
Toluene	108-88-3	Yes	DSL	EINECS
Butane	106-97-8	Yes	DSL	EINECS
Xylenes (o-, m-, p- isomers)	1330-20-7	Yes	DSL	EINECS
Benzene, 1,2,4-trimethyl-	95-63-6	Yes	DSL	EINECS
Ethyl alcohol	64-17-5	Yes	DSL	EINECS
Ethylbenzene	100-41-4	Yes	DSL	EINECS
Benzene	71-43-2	Yes	DSL	EINECS
Hexane	110-54-3	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

NFPA® Hazard Rating

Health 2 Fire 3

Reactivity 0



HMIS® Hazard Rating

Health 2 Moderate

Fire 3 Serious Physical 0 Minimal

*Chronic

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Literature References

None

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Material Name: Gasoline All Grades SDS No. 9950

Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet



SDS No. 0290 Material Name: Kerosene K1 and K2

US GHS

Synonyms: K-1 and K-2 Kerosene; Kero; Kerosene Motor Fuel; Tax Exempt Kerosene; #1 Diesel; #1 Distillate; Dyed Kerosene

Section 1 - Product and Company Identification

Manufacturer Information

Hess Corporation 1 Hess Plaza Woodbridge, NJ 07095-0961 Phone: 732-750-6000 Corporate EHS Emergency #800-424-9300 CHEMTREC www.hess.com (Environment, Health, Safety Internet Website)

Section 2 - Hazards Identification

GHS Classification:

Flammable Liquids - Category 3

Skin Corrosion/Irritation - Category 2

Eye Damage/Irritation - Category 2B

Carcinogenicity - Category 2

Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)

Aspiration Hazard - Category 1

GHS LABEL ELEMENTS







Signal Word

Danger

Hazard Statements

Flammable liquid and vapor.

Causes skin irritation.

Causes eye irritation.

Suspected of causing cancer.

May cause respiratory irritation.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Precautionary Statements

Prevention

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.

Material Name: Kerosene K1 and K2 SDS No. 0290

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands and forearms thoroughly after handling.

Obtain special instructions before use.

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

Avoid breathing fume/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Response

In case of fire: Use water spray, fog or foam.

IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash before reuse. If skin irritation occurs: Get medical advice/attention.

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 exposed or concerned: Get medical advice/attention.

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.

IF SWALLOWED: Immediately call a poison center or doctor/physician. Do NOT induce vomiting.

Storage

Store in a well-ventilated place. Keep cool.

Keep container tightly closed.

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS#	Component	Percent
8008-20-6	Kerosene	100
91-20-3	Naphthalene	0.04

A complex combination of hydrocarbons including naphthenes, paraffins, and aromatics.

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and the area of the body burned.

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Material Name: Kerosene K1 and K2 SDS No. 0290

First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

* * * Section 5 - Fire Fighting Measures * * *

General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO2, water spray, fire fighting foam, and other gaseous agents.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Unsuitable Extinguishing Media

None

Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

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Material Name: Kerosene K1 and K2 SDS No. 0290

Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Prevention of Secondary Hazards

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Handle as a combustible liquid. Keep away from heat, sparks, excessive temperatures and open flame! No smoking or open flame in storage, use or handling areas. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks."

Incompatibilities

Keep away from strong oxidizers.

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Material Name: Kerosene K1 and K2 SDS No. 0290

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

Kerosene (8008-20-6)

ACGIH: 200 mg/m3 TWA (application restricted to conditions in which there are negligible aerosol

exposures, total hydrocarbon vapor)

Skin - potential significant contribution to overall exposure by the cutaneous route

NIOSH: 100 mg/m3 TWA

Naphthalene (91-20-3)

ACGIH: 10 ppm TWA

15 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA: 10 ppm TWA; 50 mg/m3 TWA
NIOSH: 10 ppm TWA; 50 mg/m3 TWA

15 ppm STEL; 75 mg/m3 STEL

Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

* * * Section 9 - Physical & Chemical Properties * * *

Material Name: Kerosene K1 and K2 SDS No. 0290

Appearance: Pale yellow to water-white. May Odor: Characteristic petroleum

be dyed red. distillate odor

Physical State:LiquidpH:NDVapor Pressure:0.4 mm Hg @ 68 °F (20 °C)Vapor Density:AP 4.5Boiling Point:300 to 580 °F (149 to 304 °C)Melting Point:ND

Solubility (H2O): Negligible Specific Gravity: 0.784-0.834

 Evaporation Rate:
 Slow; varies with conditions
 VOC:
 ND

 Percent Volatile:
 100%
 Octanol/H2O Coeff.:
 ND

 Flash Point:
 >100 °F (38 °C)
 Flash Point Method:
 TCC

Upper Flammability Limit 5.0 Lower Flammability Limit 0.7

(UFL): (LFL):

Burning Rate: ND Auto Ignition: 410°F (210°C)

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

Incompatible Products

Keep away from strong oxidizers such as nitric and sulfuric acids.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

A: General Product Information

Harmful if swallowed.

B: Component Analysis - LD50/LC50

Kerosene (8008-20-6)

Inhalation LC50 Rat >5.28 mg/L 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Naphthalene (91-20-3)

Inhalation LC50 Rat >340 mg/m3 1 h; Oral LD50 Rat 490 mg/kg; Dermal LD50 Rat >2500 mg/kg; Dermal LD50 Rabbit >20 g/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Contact with eyes may cause mild to moderate irritation.

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Material Name: Kerosene K1 and K2 SDS No. 0290

Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

This product is not reported to have any mutagenic effects.

Carcinogenicity

A: General Product Information

Dermal carcinogenicity: positive - mice

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

B: Component Carcinogenicity

Kerosene (8008-20-6)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

Naphthalene (91-20-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

NTP: Reasonably Anticipated To Be A Human Carcinogen (Possible Select Carcinogen)

IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

Reproductive Toxicity

This product is not reported to have any reproductive toxicity effects.

Specified Target Organ General Toxicity: Single Exposure

This product is not reported to have any specific target organ general toxicity single exposure effects.

Specified Target Organ General Toxicity: Repeated Exposure

This product is not reported to have any specific target organ general toxicity repeat exposure effects.

Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Material Name: Kerosene K1 and K2 SDS No. 0290

Section 12 - Ecological Information

Ecotoxicity

A: General Product Information

Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Naphthalene (91-20-3)

Test & Species	Conditions
----------------	------------

5.74-6.44 mg/L 96 Hr LC50 Pimephales promelas

[flow-through]

96 Hr LC50 Oncorhynchus mykiss 1.6 mg/L [flow-

through]

96 Hr LC50 Oncorhynchus mykiss 0.91-2.82 mg/L

[static]

96 Hr LC50 Pimephales promelas 1.99 mg/L [static] 96 Hr LC50 Lepomis macrochirus 31.0265 mg/L

[static]

72 Hr EC50 Skeletonema costatum 0.4 mg/L 48 Hr LC50 Daphnia magna 2.16 mg/L 1.96 mg/L [Flow 48 Hr EC50 Daphnia magna

through]

48 Hr EC50 Daphnia magna 1.09 - 3.4 mg/L

[Static]

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility in Soil

No information available.

Section 13 - Disposal Considerations

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 14 - Transportation Information

DOT Information

Shipping Name: Kerosene

UN #: 1223 Hazard Class: 3 Packing Group: III

Material Name: Kerosene K1 and K2 SDS No. 0290

Placard:



* * * Section 15 - Regulatory Information * * *

Regulatory Information

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Naphthalene (91-20-3)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

SARA Section 311/312 - Hazard Classes

Acute Health	Chronic Health	<u>Fire</u>	Sudden Release of Pressure	Reactive
X	X	Χ		

SARA SECTION 313 - SUPPLIER NOTIFICATION

This product may contain listed chemicals below the de minimis levels which therefore are not subject to the supplier notification requirements of Section 313 of the Emergency Planning and Community Right- To-Know Act (EPCRA) of 1986 and of 40 CFR 372. If you may be required to report releases of chemicals listed in 40 CFR 372.28, you may contact Hess Corporate Safety if you require additional information regarding this product.

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Kerosene	8008-20-6	No	Yes	No	Yes	Yes	No
Naphthalene	91-20-3	Yes	Yes	Yes	Yes	Yes	No

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

Additional Regulatory Information

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Material Name: Kerosene K1 and K2 SDS No. 0290

Component Analysis - Inventory

Component	CAS#	TSCA	CAN	EEC
Kerosene	8008-20-6	Yes	DSL	EINECS
Naphthalene	91-20-3	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

NFPA® Hazard Rating Health 2

Fire 2 Reactivity 0



HMIS® Hazard Rating Health 2* Moderate

Fire 2 Moderate Physical 0 Minimal *Chronic

Key/Legend

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Literature References

None

Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet

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SAFETY DATA SHEET

1. Identification

Product identifier Bio-Con™ Sludge Sediment Remover

Other means of identification

Product code 05557

Recommended use Diesel fuel system cleaner

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** 800-521-3168

Assistance

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 hazardsFlammable liquidsCategory 3Health hazardsAcute toxicity, dermalCategory 4

Acute toxicity, inhalation

Category 4

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2

Sensitization, skin

Category 1

Germ cell mutagenicity

Carcinogenicity

Category 2

Reproductive toxicity (the unborn child)

Category 2

Category 2

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Specific target organ toxicity, single exposure Category 3 narcotic effects

Aspiration hazard

azard Category 1

hazar

Hazardous to the aquatic environment,

Hazardous to the aquatic environment, acute

long-term hazard

Category 2

Category 1

iong-term nazar

OSHA defined hazards Not classified.

Label elements

Environmental hazards



Signal word

Danger

Hazard statement

Flammable liquid and vapor. May be fatal if swallowed and enters airways. Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing genetic defects. Suspected of causing cancer. Suspected of damaging the unborn child. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

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. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. 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. Avoid breathing mist or vapor. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. 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. In case of fire: Do not use water jet as an extinguisher, as this will spread the fire. Collect spillage.

Storage Disposal Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

13.26% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 98.29% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

/lixtures			
Chemical name	Common name and synonyms	CAS number	%
Diesel Fuel No. 2		68476-34-6	80 - 90
2-Butoxyethanol		111-76-2	10 - 20
Diethylene glycol monomethyl ether		111-77-3	1 - 3
Benthiazole		21564-17-0	< 1
Naphthalene		91-20-3	< 0.2

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

4. First-aid measures

	 		_	_	_	_	
Inhalat	 _						

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical advice/attention if you feel unwell. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. Wash contaminated clothing before reuse.

Eye contact

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.

Ingestion

delayed

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Aspiration may cause

Indication of immediate medical attention and special

pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

medical attention and special treatment needed

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.

General information

Take off all contaminated clothing immediately. 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

Suitable extinguishing media Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions General fire hazards

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

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. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors and spray mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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 material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

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.

Environmental precautions

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

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. Take precautionary measures against static discharges. Use non-sparking tools and explosion-proof equipment. Do not get in eyes, on skin, or on clothing. Avoid inhalation of vapors and spray mists. 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. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Avoid release to the environment. 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. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. 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

Components	Туре	Value	
2-Butoxyethanol (CAS 111-76-2)	PEL	240 mg/m3	
,		50 ppm	
Naphthalene (CAS 91-20-3)	PEL	50 mg/m3	
		10 ppm	
US. ACGIH Threshold Limit Values	•		
Components	Туре	Value	Form
2-Butoxyethanol (CAS 111-76-2)	TWA	20 ppm	
Diesel Fuel No. 2 (CAS 68476-34-6)	TWA	100 mg/m3	Inhalable fraction and vapor.
Naphthalene (CAS 91-20-3)	TWA	10 ppm	•

US. NIOSH: Pocket Guide to Chemical Hazards Components Value Type 2-Butoxyethanol (CAS TWA 24 mg/m3 111-76-2) 5 ppm Naphthalene (CAS 91-20-3) **STEL** 75 ma/m3 15 ppm **TWA** 50 ma/m3 10 ppm

Biological limit values

ACGIH Biological Exposure Indices						
Components	Value	Determinant	Specimen	Sampling Time		
2-Butoxyethanol (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*		

^{* -} For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

2-Butoxyethanol (CAS 111-76-2) Skin designation applies.

US - Tennessee OELs: Skin designation

2-Butoxyethanol (CAS 111-76-2)

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

Diesel Fuel No. 2 (CAS 68476-34-6)

Naphthalene (CAS 91-20-3)

Can be absorbed through the skin.

Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

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

2-Butoxyethanol (CAS 111-76-2)

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. Eye wash facilities and emergency shower must be available when handling this product.

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: Neoprene. Nitrile. Polyvinyl chloride (PVC).

Other Wear appropriate chemical resistant 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

When using do not 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. Contaminated work clothing should not

be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical state Liquid.
Form Liquid.
Color Amber.
Odor Petroleum.

Odor threshold Not available. pH Not available.

Melting point/freezing point -119.2 °F (-84 °C) estimated Initial boiling point and boiling 212 °F (100 °C) estimated

range

Flash point 122 °F (50 °C) Tag Closed Cup

Evaporation rate Slow.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower 0.6 % estimated

(%)

Flammability limit - upper

(%)

36 % estimated

Vapor pressure 0.8 hPa estimated Vapor density > 1 (air = 1)

Relative density 0.86

Solubility (water) Negligible.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 446 °F (230 °C) estimated

Decomposition temperatureNot available.Viscosity (kinematic)Not available.Percent volatile97.7 % 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

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Harmful if inhaled. May cause drowsiness and dizziness. Headache. Nausea, vomiting.Skin contact Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Eye contact Causes serious eye irritation.

Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious

chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics

Headache. May cause drowsiness and dizziness. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. Harmful if inhaled. Harmful in contact with skin.

Narcotic effects. May cause an allergic skin reaction. May cause respiratory irritation.

Product Species Test Results

Bio-Con™ Sludge Sediment Remover

Acute Dermal

LD50 Rabbit 1440 mg/kg estimated

Inhalation

LC50 Rat 4011 ppm, 4 hours estimated

9.1 mg/l, 4 hours estimated

Oral

LD50 Rat 2716 mg/kg estimated

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

Causes serious eye irritation.

irritation

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity Suspected of causing genetic defects.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

2-Butoxyethanol (CAS 111-76-2) 3 Not classifiable as to carcinogenicity to humans. Diesel Fuel No. 2 (CAS 68476-34-6) 3 Not classifiable as to carcinogenicity to humans.

Naphthalene (CAS 91-20-3) 2B Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Naphthalene (CAS 91-20-3) Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity Suspected of damaging the unborn child.

Specific target organ toxicity -

single exposure

May cause respiratory irritation. May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

May be fatal if swallowed and enters airways. If aspirated into lungs during swallowing or vomiting,

may cause chemical pneumonia, pulmonary injury or death.

Chronic effects May be harmful if absorbed through skin.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and

prolonged. These effects have not been observed in humans.

12. Ecological information

otoxicity	Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.			
Product		Species	Test Results	
Bio-Con™ Sludge Sec	diment Remover			
Aquatic				
Acute				
Crustacea	EC50	Daphnia	1.7933 mg/l, 48 hours estimated	
Fish	LC50	Fish	4.9162 mg/l, 96 hours estimated	
Components		Species	Test Results	
2-Butoxyethanol (CAS	3 111-76-2)			
Aquatic				
Acute				
Crustacea	EC50	Water flea (Daphnia magna)	1550 mg/l, 48 hours	
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	>= 1000 mg/l, 96 hours	

^{*} Estimates for product may be based on additional component data not shown.

Components Species Test Results

Benthiazole (CAS 21564-17-0)

Aquatic

Fish LC50 Trout family (Salmonidae) 0.006 - 0.017 mg/l, 96 hours

Diesel Fuel No. 2 (CAS 68476-34-6)

Aquatic

Acute

Fish LC50 Fathead minnow (Pimephales promelas) 35 mg/l, 96 hours

Diethylene glycol monomethyl ether (CAS 111-77-3)

Aquatic

Fish LC50 Bluegill (Lepomis macrochirus) 7500 mg/l, 96 hours

Naphthalene (CAS 91-20-3)

Aquatic

Acute

Crustacea EC50 Water flea (Daphnia magna) 1.09 - 3.4 mg/l, 48 hours

Fish LC50 Rainbow trout, donaldson trout 1.6 mg/l, 96 hours

(Oncorhynchus mykiss)

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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

2-Butoxyethanol 0.81, log Pow

Benthiazole 3.3 Naphthalene 3.3

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. 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 D001: Waste Flammable material with a flash point <140 F

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

DOT

NON-BULK

Not regulated as dangerous goods by ground.

DOT

Air

UN number UN1993

UN proper shipping name Flammable liquids, n.o.s. (Diesel Fuel, 2-Butoxyethanol), Limited Quantity

Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
Packing group III

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions B1, B52, IB3, T4, TP1, TP29

Packaging exceptions 150
Packaging non bulk 203
Packaging bulk 242

^{*} Estimates for product may be based on additional component data not shown.

DOT

Maritime

UN1993 **UN** number

UN proper shipping name Flammable liquids, n.o.s. (Diesel Fuel, 2-Butoxyethanol), Limited Quantity

Transport hazard class(es)

Class 3 Subsidiary risk _ Label(s) 3 Packing group Ш

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions B1, B52, IB3, T4, TP1, TP29

150 Packaging exceptions Packaging non bulk 203 242 Packaging bulk

IATA

UN1993 **UN number**

UN proper shipping name Flammable liquid, n.o.s. (Diesel Fuel, 2-Butoxyethanol), Limited Quantity

Transport hazard class(es)

3 Class Subsidiary risk Ш Packing group **Environmental hazards** No. **ERG Code** 3L

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo

aircraft

Allowed. Cargo aircraft only

IMDG

UN number UN1993

UN proper shipping name FLAMMABLE LIQUID, N.O.S. (Diesel Fuel, 2-Butoxyethanol), LIMITED QUANTITY

Transport hazard class(es)

Class 3 Subsidiary risk Ш Packing group **Environmental hazards**

Marine pollutant Yes **EmS** F-E, S-E

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US** federal regulations

Standard, 29 CFR 1910.1200.

One or more components are not listed on TSCA.

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

Allowed.

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

2-Butoxyethanol (CAS 111-76-2)

Diethylene glycol monomethyl ether (CAS 111-77-3)

Naphthalene (CAS 91-20-3)

CERCLA Hazardous Substance List (40 CFR 302.4)

2-Butoxyethanol (CAS 111-76-2) Listed. Diethylene glycol monomethyl ether (CAS 111-77-3) Listed. Naphthalene (CAS 91-20-3) Listed.

CERCLA Hazardous Substances: Reportable quantity

Naphthalene (CAS 91-20-3)

100 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

Diethylene glycol monomethyl ether (CAS 111-77-3)

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Food and Drug

Not regulated.

Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

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

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

2-Butoxyethanol (CAS 111-76-2)

Diesel Fuel No. 2 (CAS 68476-34-6)

Diethylene glycol monomethyl ether (CAS 111-77-3)

Naphthalene (CAS 91-20-3)

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

2-Butoxyethanol (CAS 111-76-2)

Diesel Fuel No. 2 (CAS 68476-34-6)

Diethylene glycol monomethyl ether (CAS 111-77-3)

Naphthalene (CAS 91-20-3)

US. Massachusetts RTK - Substance List

2-Butoxyethanol (CAS 111-76-2)

Diethylene glycol monomethyl ether (CAS 111-77-3)

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

Methanol (CAS 67-56-1)

Naphthalene (CAS 91-20-3)

2-Butoxyethanol (CAS 111-76-2)

Diesel Fuel No. 2 (CAS 68476-34-6)

Diethylene glycol monomethyl ether (CAS 111-77-3)

US. Rhode Island RTK

2-Butoxyethanol (CAS 111-76-2)

Diethylene glycol monomethyl ether (CAS 111-77-3)

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

Naphthalene (CAS 91-20-3) Listed: April 19, 2002

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 98.3 %

51.100(s))

Consumer products Not regulated

(40 CFR 59, Subpt. C)

State

Consumer products Not regulated VOC content (CA) 97.7 % VOC content (OTC) 97.7 %

International Inventories

Country(s) or region

Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
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
Koroo	Eviating Chamicals List (ECL)	No

KoreaExisting Chemicals List (ECL)NoNew ZealandNew Zealand InventoryNo

Philippines Philippine Inventory of Chemicals and Chemical Substances No (PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

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

Inventory name

Issue date04-21-2015Prepared byAllison Cho

Version # 01

Further information CRC # 619E

HMIS® ratings Health: 2*
Flammability: 2

Physical bazard:

Physical hazard: 0 Personal protection: B

NFPA ratings Health: 2

Flammability: 2 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.

On inventory (yes/no)*

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).

POWER SERVICE PRODUCTS, INC. SAFETY DATA SHEET



SECTION 1 - IDENTIFICATION

PRODUCT NAME: DIESEL 9•1•1

Unless otherwise noted, all sections of this MSDS apply to each of the following products and part numbers.

PART NUMBERS:

8016-09, 8025-09, 8025-12, 8080-06, 8050-02, 8055-01, 8260-01 18016-09, 18025-12, 18080-06

COMPANY IDENTIFICATION:

Power Service Products, Inc. P.O. Box 1089 Weatherford, TX 76086

Email: psp@powerservice.com

Phone: 800/643-9089 or 817-599-9486

Fax: 817-599-4893

Emergency Phone Number: Within USA 1-800-424-9300. Outside USA 001-703-527-3887

(Call Collect).

RECOMMENDED USES: Diesel fuel additive

SECTION 2 - HAZARD(S) IDENTIFICATION

CLASSIFICATION UNDER 29 CFR 1910.1200(d)

(NC=product does not meet classification criteria)

Health Hazard Criteria	Category
Acute Toxicity, Oral:	NC
Acute Toxicity, Dermal:	NC
Acute Toxicity, Inhalation, Vapors:	NC
Skin Corrosion/Irritation:	2
Serious Eye Damage/Eye Irritation:	2
Respiratory Sensitization:	NC
Skin Sensitization:	NC
Germ Cell Mutagenicity:	NC

Health Hazard Criteria	Category
Carcinogenicity:	NC
Reproductive Toxicity:	NC
Specific Target Organ Toxicity, Single	3
Exposure:	
Specific Target Organ Toxicity, Repeated	NC
or Prolonged Exposure:	
Aspiration Hazard:	1

Physical Properties Criteria	Category
Explosives:	NC
Flammable Gases:	NC
Flammable Aerosols:	NC
Oxidizing Gases:	NC
Gases Under Pressure:	NC
Flammable Liquids:	3
Flammable Solids:	NC
Self-Reactive Chemicals:	NC
Pyrophoric Liquids:	NC
Pyrophoric Solids:	NC
Self-Heating Chemicals:	NC
Chemicals Which, in Contact with Water,	NC
Emit Flammable Gases:	
Oxidizing Liquids:	NC
Oxidizing Solids:	NC
Organic Peroxides:	NC
Corrosive to Metals:	NC

LABEL SIGNAL WORD, HAZARD STATEMENTS, SYMBOLS AND PRECAUTIONARY STATEMENTS UNDER 29 CFR 1910.1200(f):

Please see the Note regarding product labeling in Section 16.

Signal Word(s): Danger

Hazard Statement(s): Flammable liquid and vapor. Toxic if inhaled. May be fatal if swallowed and enters airways. Harmful if swallowed. Causes skin and serious eye irritation. May cause respiratory irritation.

Symbols:







Precautionary Statement(s): Keep away from sparks and open flames. No smoking. Keep container tightly closed. Use only non-sparking tools. Ground/Bond container and receiving equipment. Use explosion-proof pumps when pumping. Take precautionary measures against

static discharge. Avoid breathing vapors. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and eye protection. Store locked up and in cool, well ventilated place. KEEP OUT OF REACH OF CHILDREN.

Hazards Not Otherwise Classified: None

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

The specific chemical identity and exact concentration percentage has been withheld as a Trade Secret. Specific chemical information will be made available to health professionals in accordance with 29 CFR 1910.1200.

INGREDIENTS CLASSIFIED AS HEALTH HAZARDS

Chemical Name	Common Name/Synonyms	CAS Number	Concentration (%)
Aliphatic hydroxy hydrocarbons	Trade secret	Trade secret	40 - 90
Petroleum Distillates	Trade secret	Trade secret	20 - 40

SECTION 4 - FIRST AID MEASURES

As a precaution, exposure to liquids, vapors, mists and fumes should be minimized.

EYE CONTACT: 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.

SKIN CONTACT: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs get medical advice/attention.

INHALATION: Remove person to fresh air and keep comfortable for breathing. Call a doctor.

INGESTION: If swallowed, IMMEDIATELY call a doctor. Do NOT induce vomiting.

SECTION 5 - FIRE AND EXPLOSION HAZARD DATA

EXTINGUISHING MEDIA: Use water fog, alcohol-resistant foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

SPECIFIC HAZARDS: Vapors are heavier than air and may travel along the ground to a distant ignition source and flash back. See Section 10 for Stability and Reactivity. **NOTE:** EMPTY CONTAINERS CONTAIN COMBUSTIBLE VAPORS THAT CAN CAUSE FLASH FIRES OR EXPLOSIONS. CONTAINERS ARE SINGLE-TRIP CONTAINERS AND SHOULD NOT BE USED FOR ANY REASON AFTER BEING EMPTIED. DO NOT USE CUTTING TORCH

EQUIPMENT OR ANY OTHER FLAME OR OTHER SOURCES OF IGNITION ON ANY EMPTY CONTAINER.

PROTECTIVE EQUIPMENT AND PRECAUTIONS: Use standard protective equipment including self-contained breathing apparatus (SCBA).

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PROCEDURES: Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas. Eliminate all sources of ignition in the vicinity of the spill or released vapor. See Section 2 for Hazards Identification. See Section 4 for First Aid Measures. See Section 5 for Fire Fighting Information. See Section 8 for Personal Protective Equipment.

SPILL CONTAINMENT AND CLEAN-UP: Eliminate potential sources of ignition. Stop leak if it can be done without risk. Dike and contain spill. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly. A vapor suppressing foam may be used to reduce vapors. Local, state and federal laws and/or regulations may apply to releases and disposal of this material, as well as those materials and items employed in the clean-up releases. The user/responder will need to determine which local, state and federal laws and/or regulations are applicable. The National Response Center can be reached at 1-800-424-8802.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Avoid contact with eyes and skin. Use only with adequate ventilation. Use proper bonding and/or grounding procedures. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Keep away from ignition sources such as heat, sparks, and flames. No smoking.

CONDITIONS FOR SAFE STORAGE: DO NOT USE OR STORE near heat, sparks, or flame. USE AND STORE ONLY IN A WELL-VENTILATED AREA. Handle containers with care. Keep container closed when not in use. Store locked up.

STORAGE TEMPERATURE: -40°F to 100°F (-40°C to 38°C)

EMPTY CONTAINER WARNING: EMPTY CONTAINERS MAY CONTAIN FLAMMABLE VAPORS AND CAN BE DANGEROUS. SEE SECTION 5 FOR FIRE AND EXPLOSION HAZARD DATA.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

		OSHA	ACGIH NIOSH					
	CAS#	PEL	TLV	STEL	REL	STEL	IDLH	Note
Ethylbenzene	100-41-4	100 ppm	20 ppm	not est.	100 ppm	125 ppm	800 ppm (LEL)	n/a
Naphthalene	91-20-3	10 ppm	10 ppm	not est	10 ppm	15 ppm	250 ppm	skin
Petroleum Distillates	n/a	500 ppm	not est.	not est	not est	not est	not est	n/a
2-Butanol	78-92-2	150 ppm	100 ppm	not est	100 ppm	150 ppm	2,000 ppm	n/a
N-Butanol	71-36-3	100 ppm	20 ppm	not est	not est.	not est.	1,400 ppm (LEL)	skin
Cumene	98-82-8	50 ppm	50 ppm	not est	50 ppm	not est.	900 ppm (LEL)	Skin
Toluene	108-88-3	100 ppm	20 ppm	not est.	100 ppm	150 ppm	500 ppm	Skin

ENGINEERING CONTROLS: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Local exhaust ventilation is recommended to control exposure.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Eyes and Face: Eye protection such as safety glasses or chemical goggles is recommended if contact is likely.

Skin: If prolonged or repeated skin contact is likely, chemical/oil resistant clothing and gloves are recommended. Wear additional protective clothing as appropriate.

Respiratory: Wear a NIOSH/MSHA approved respirator as necessary.

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. Practice good housekeeping.

NOTE: These precautions are for room temperature handling.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid, straw yellow
Odor	Strong solvent
Odor Threshold	Not available
pH	7 – 8 (slightly basic)
Melting point/Freezing point	Not available
Initial Boiling Point and Boiling Range	200°F (93°C) est.
Flash Point	75°F (TCC) 24°C
Evaporation Rate	Not available

Flammability	Not available
Upper / lower Flammability or Explosive Limits	Not available
Vapor Pressure	0.58 est.
Vapor Density	>3.0 est,
Relative Density/Specific Gravity (at 60°F)	0.84
Solubility	Not available
Partition Coefficient; n-octanol / water	Not available
Auto-ignition Temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Pour Point	-55°F (-48°C)

SECTION 10 - STABILITY AND REACTIVITY

REACTIVITY: see Incompatible Materials below

CHEMICAL STABILITY: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

CONDITIONS TO AVOID: Flames, high energy ignition sources, and elevated temperatures.

INCOMPATIBLE MATERIALS: May react with oxygen, oxidizing agents, such as; chlorates, nitrates, peroxides, etc., amines, caustics, alkanolamines halogens, chlorine.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides, products of incomplete combustion.

HAZARDOUS POLYMERIZATION:

Hazardous polymerization will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE

INGESTION	INHALATION	SKIN CONTACT	EYE CONTACT	SKIN ABSORPTION
	Х	X	X	X

SYMPTOMS RELATED TO PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS: Breathing of high vapor concentrations may cause dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness. The vapor or fumes from this material may cause respiratory irritation. Breathing this material at elevated concentrations causes central nervous system effects. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors, or convulsions, loss of consciousness, coma or death.

DELAYED AND IMMEDIATE EFFECTS AND CHRONIC EFFECTS FROM SHORT- AND LONG-TERM EXPOSURE: Repeated skin exposure to a component of this product may cause irritation, even a burn; may cause a more severe response on covered skin, such as under clothing or gloves. Inhalation exposure to a component of this product has caused fetotoxicity in the presence of maternal toxicity in animals.

NUMERICAL MEASURES OF TOXICITY

Note: the information provided below are estimates; testing of the product is not available.

Acute Oral Toxicity	Acute Dermal Toxicity	Acute Inhalation
(ATE _{mix} estimate)	(ATE _{mix} estimate)	(ATE _{mix} estimate)
Does not meet criteria	Does not meet criteria	30 (vapors)

SENSITIZATION: No information available.

MUTAGENICITY: No information available.

CARCINOGENICITY LISTINGS – the following chemicals are listed as indicated:

Chemical	List
Cumene	IARC, NTP
Ethylbenzene	IARC
Naphthalene	IARC, NTP

REPODUCTIVE TOXICITY: No information available.

TERATOGENICITY/EMBRYOTOXICITY: This product contains a component of a complex mixture (Xylenes (1330-20-7)) that has been shown to cause teratogenicity and/or embryotoxicity.

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): Respiratory tract irritation.

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): No information available

ASPIRATION HAZARD: Aspiration hazard identified.

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY:

This material is expected to be toxic to aquatic organisms.

PERSISTENCE AND DEGRADABILITY: No information available.

BIOACCUMULATIVE POTENTIAL: No information available.

MOBILITY IN SOIL: No information available.

OTHER ADVERSE EFFECTS: No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

RCRA Information: Disposal of unused product may be subject to RCRA hazardous waste regulations (40 CFR Part 261). Disposal of the used product may also be regulated as hazardous waste due to resulting mixture characteristics, mixture components or product use. Such changes to the product may result in different and/or additional hazardous waste codes. Potential RCRA waste code based on the product as shipped: D001 IGNITABILITY.

State or local laws may impose additional regulatory requirements regarding disposal. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

EMPTY CONTAINER WARNING: EMPTY CONTAINERS MAY CONTAIN FLAMMABLE VAPORS AND CAN BE DANGEROUS. SEE SECTION 5 FOR FIRE AND EXPLOSION HAZARD DATA.

SECTION 14 - TRANSPORTATION INFORMATION

The following part numbers are classified as Consumer Commodity ORM-D:

8016-09, 8025-09, 8025-12, 8080-06, 18016-09, 18025-12, 18080-06

The following part numbers are regulated by DOT:

8050-02, 8055-01, 8260-01

PROPER SHIPPING NAME: Flammable Liquid, N.O.S., (Aliphatic Hydroxy

Hydrocarbons)

HAZARD CLASS: 3 I.D. NUMBER: UN 1993 PACKING GROUP: III

PLACARDING: Flammable Liquid

SECTION 15 - REGULATORY INFORMATION

§14(a) Consumer Product Safety Act General Certificate of Conformity

Power Service Products, Inc. certifies that this product meets the statutory and regulatory requirements of the US Consumer Products Safety Act, the Federal Hazardous Substances Act, and the Poison Prevention Packaging Act of 1970, as applicable. The Power Service products are manufactured in the United States in Weatherford, Texas, unless otherwise indicated on the product label. The product manufacture lot code is stamped on the product container. This

Certification is based upon a reasonable testing program conducted by Power Service Products, Inc. which includes a quality control program incorporating, as necessary, confirmation of compliance by component suppliers. Third-party testing is not required to certify compliance. Further details may be obtained by contacting the Power Service Products, Inc. EHS Manager at 1-800-643-9089.

Contents of this SDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200

TSCA STATUS:

All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.

EPA SARA TITLE III CHEMICAL LISTINGS:

Section 302 Extremely Hazardous Substances: None

Sections 311/312 Hazard Class:

Acute Health Effects: Yes Sudden Release of Pressure Hazard: No

Chronic Health Effects: Yes Reactivity Hazard: No

Fire Hazard: Yes

NFPA (NATIONAL FIRE PROTECTION ASSOCIATION) RATING:

HEALTH: 2 FIRE: 3

REACTIVITY: 0

Section 313:

Specific chemical information is being withheld as a Trade Secret. The following chemicals subject to the reporting requirements of EPCRA Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (40 CFR Part 372) may be present in this product at a concentration that does not exceed the specified upper weight percentage.

CAS Number	Chemical Name	Max %
78-92-2	2-Butanol	21.5
71-36-3	N-Butanol	21.5
100-41-4	Ethylbenzene	9.0
98-82-8	Cumene	1.5
108-88-3	Toluene	1.5
91-20-3	Naphthalene	0.5

State or local laws may impose additional regulatory requirements for components of this material. It is the responsibility solely of the Employer to maintain compliance with State and Local reporting.

This product contains a chemical known to the state of California to cause cancer and/or birth defects or other reproductive harm: ethylbenzene, toluene, cumene, naphthalene.

SECTION 16 – OTHER INFORMATION

DATE OF PREPARATION / REVISION: September 28, 2015

NOTE regarding product labeling: The OSHA Hazard Communication Standard applies to hazardous chemicals known to be present in the workplace. However, the labeling and Safety Data Sheet requirements do not apply to consumer products when they are used in the workplace for the purposes intended by the manufacturer and the use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the intended purpose. Power Service Products intends for product packaged in 1 gallon or smaller containers to be used by consumers and has labeled those containers as required under the Consumer Product Safety Commission regulations. Power Service Products intends for product packaged in containers larger than 1 gallon to be used in the workplace and has labeled those products as required by the OSHA Hazard Communication Standard. The Consumer Product Safety Commission and OSHA Hazard Communication Standard labeling requirements are different and variations between the consumer and industrial labels may occur. It is the employer's responsibility to purchase the appropriate product for use in the workplace.

The information contained herein is offered in good faith and is believed to be accurate based on the data available to us as of the date of SDS preparation. The information in this document applies to this specific product as supplied. It may not be appropriate for this product if the product is used in combination with other materials. The information in this document is not intended to constitute product performance information. Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product. No statement shall be construed as an endorsement of any product or process. The recommended industrial hygiene and safe handling procedures are believed to be valid in the context of the intended use as described in product labeling. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. You are urged to obtain material safety data sheets for all products you buy, process, use or distribute, and are encouraged to advise those who may come in contact with such products of the information contained therein. Regulatory requirements are subject to change and may differ between locations. It is the buyer's /user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. No warranty or quarantee is expressed or implied with respect to this product, the accuracy and sufficiency of the data or recommendations herein, or the results to be obtained from the use of this product. IN NO EVENT SHALL POWER SERVICE PRODUCTS, INC. BE LIABLE FOR ANY LOSS, CLAIM, DAMAGE OR LIABILITY OF ANY KIND, WHICH MAY ARISE FROM OR IN CONNECTION WITH THE INFORMATION CONTAINED IN THIS DOCUMENT OR FROM THE USE. HANDLING OR STORAGE OF THE PRODUCT BY THE BUYER/USER, WHETHER DIRECT, INDIRECT. OR CONSEQUENTIAL. OR FOR ANY CLAIM BY ANY THIRD PARTY. BEYOND THE PURCHASE PRICE OR REPLACEMENT OF THE PRODUCT IN CONNECTION WITH WHICH SUCH LOSS, CLAIM, DAMAGE OR LIABILITY AROSE.

THE FOREGOING LIMITATIONS APPLY REGARDLESS OF THE CAUSES OR CIRCUMSTANCES GIVING RISE TO SUCH LOSS, CLAIM, DAMAGE OR LIABILITY, EVEN IF

SUCH LOSS, CLAIM, DAMAGE, OR LIABILITY IS BASED ON NEGLIGENCE OR OTHER TORTS OR BREACH OF CONTRACT.

Safety Data Sheet



Section 1: Identification

Product identifier

Product Name • NAPA Diesel Fuel Conditioner with Antigel

Synonyms • 590159

Product Code • 9600; 9601; 9612

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

Recommended use • Read label for use directions and claims

Restrictions on use • For use only in diesel fuel

Details of the supplier of the safety data sheet

Manufacturer
 Gold Eagle Co.

4400 S. Kildare Avenue Chicago, IL 60632-4372

United States

http://www.goldeagle.com/

Telephone (General) • 773-376-4400

Emergency telephone number

• 1-800-535-5053 - (INFOTRAC #22283)

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Flammable Liquids 4

Aspiration 1

Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

Carcinogenicity 2
Reproductive Toxicity 1B

Label elementsOSHA HCS 2012

DANGER





Hazard statements · Combustible liquid

May be fatal if swallowed and enters airways

May cause drowsiness or dizziness Suspected of causing cancer.

May damage fertility or the unborn child.

Precautionary statements

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 and/or hot surfaces. - No smoking.

Avoid breathing mists, vapours, and/or spray. Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

In case of fire: Use appropriate media for extinction.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing

Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Do NOT induce vomiting.

IF exposed or concerned: Get medical advice/attention.

Storage/Disposal • Store in a well-ventilated place. Keep container tightly closed.

> Keep cool. Store locked up.

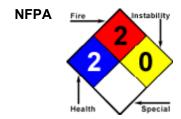
Dispose of content and/or container in accordance with local, regional, national, and/or

international regulations.

Other hazards

OSHA HCS 2012 Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Other information



Section 3 - Composition/Information on Ingredients

Substances

· Material does not meet the criteria of a substance.

Mixtures

Composition				
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive
Distillates (petroleum), hydrotreated light	CAS :64742-47-8	0% TO 50%	NDA	OSHA HCS 2012: Flam. Liq. 4; Asp. Tox. 1; STOT SE 3: Narc.
2-Ethylhexyl nitrate	CAS: 27247- 96-7	0% TO 24%	NDA	OSHA HCS 2012: Flam. Liq. 4
Proprietary	Proprietary	<= 10%	NDA	OSHA HCS 2012: Flam. Liq. 4; Eye Irrit. 2; STOT SE 3: Narc.
Solvent naphtha	CAS :64742- 94-5	0% TO 6%	NDA	OSHA HCS 2012: Not Classified
1,2,4-Trimethylbenzene	CAS:95-63-6	0% TO 4%	NDA	OSHA HCS 2012: Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3: Narc; STOT SE 3: Resp. Irrit. (inhl); Asp. Tox. 1
Solvent naphtha (petroleum), light aromatic	CAS :64742- 95-6	0% TO 3.7%	NDA	OSHA HCS 2012: Eye Irrit. 2; Asp. Tox. 1

Preparation Date: 16/October/2015

Format: GHS Language: English (US) OSHA HCS 2012 Revision Date: 16/October/2015 Page 2 of 15

1,3,5-Trimethylbenzene	CAS :108-67-	0% TO 0.6%	NDA	OSHA HCS 2012: Flam. Liq. 3; Eye Irrit. 2; Skin Irrit. 2; STOT SE 3: Resp. Irrit.; STOT SE 3: Narc.; Asp. Tox. 1
1,2,3-Trimethylbenzene	CAS :526-73-	0% TO 0.6%	NDA	OSHA HCS 2012: Flam. Liq. 3; STOT SE 3: Narc.
Xylene	CAS :1330- 20-7	0% TO 0.5%	NDA	OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (inhl); Skin Irrit. 2; Eye Irrit. 2; Repr. 1B (Inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit.
Naphthalene	CAS :91-20-3	0% TO 0.499%	NDA	OSHA HCS 2012: Flam. Sol. 2; Acute Tox. 4 (orl); Skin Irrit. 2; Muta. 2; Carc. 2; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (Blood, Eyes; Orl, Inhl)
1-Methylethylbenzene	CAS:98-82-8	0% TO 0.12%	NDA	OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (orl); Skin Irrit. 2; Eye Irrit. 2; Carc. 2 (inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit. (inhl); Asp. Tox. 1

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

 Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

 In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. Remove and isolate contaminated clothing. Wash skin with soap and water.

Eye

 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention immediately.

Ingestion

• Do NOT induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

• Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

 All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media • Use carbon dioxide, dry chemical, foam and/or water fog.

Unsuitable Extinguishing Media

Water spray or fog can cool fire but may not be effective in extinguishing fire.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

· Containers may explode when heated.

Vapor explosion hazard indoors, outdoors or in sewers.

Combustible material: may burn but does not ignite readily.

Many liquids are lighter than water.

Most vapors are heavier than air. They will spread along ground and collect in low or

confined areas (sewers, basements, tanks).

Runoff to sewer may create fire or explosion hazard.

Vapors may form explosive mixtures with air.

Vapors may travel to source of ignition and flash back.

Water may cause frothing.

Hazardous Combustion Products

· No data available

Advice for firefighters

Structural firefighters' protective clothing will only provide limited protection.
 Wear positive pressure self-contained breathing apparatus (SCBA).
 Move containers from fire area if you can do it without risk.
 LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Ventilate enclosed areas. Do not walk through spilled material. Use appropriate
Personal Protective Equipment (PPE) Do not touch damaged containers or spilled
material unless wearing appropriate protective clothing.

Emergency Procedures

As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

Stop leak if you can do it without risk.
 Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Use clean non-sparking tools to collect absorbed material. A vapor suppressing foam may be used to reduce vapors.

All equipment used when handling the product must be grounded. LARGE SPILLS: Dike far ahead of liquid spill for later disposal.

LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

Use only in well ventilated areas. Avoid contact with heat and ignition sources. Take
precautionary measures against static charges. Do not use sparking tools. All
equipment used when handling the product must be grounded. Wear appropriate
personal protective equipment, avoid direct contact. Avoid breathing mist, vapours,
spray. Avoid contact with skin, eyes, and clothing. Wash thoroughly with soap and
water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities

Storage

Store in a tightly closed container. Store in a well-ventilated place. Store below 150°
 F. Store in an area equipped with automatic sprinklers or fire extinguishing system.

 Empty containers contain product residues, assume emptied containers to have same hazards as full containers. Do not apply high heat or flame to containers. Keep separate from strong oxidizing agents.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA

Naphthalene	TWAs	10 ppm TWA	10 ppm TWA; 50 mg/m3 TWA	10 ppm TWA; 50 mg/m3 TWA
(91-20-3)	STELs	Not established	15 ppm STEL; 75 mg/m3 STEL	Not established
1- Methylethylbenzene (98-82-8)	TWAs	50 ppm TWA	50 ppm TWA; 245 mg/m3 TWA	50 ppm TWA; 245 mg/m3 TWA
Xylene	TWAs	100 ppm TWA	Not established	100 ppm TWA; 435 mg/m3 TWA
(1330-20-7)	STELs	150 ppm STEL	Not established	Not established
1,2,3- Trimethylbenzene (526-73-8)	TWAs	Not established	25 ppm TWA; 125 mg/m3 TWA	Not established
1,2,4- Trimethylbenzene (95-63-6)	TWAs	Not established	25 ppm TWA; 125 mg/m3 TWA	Not established
1,3,5- Trimethylbenzene (108-67-8)	TWAs	Not established	25 ppm TWA; 125 mg/m3 TWA	Not established
Proprietary	TWAs	100 ppm TWA	100 ppm TWA; 600 mg/m3 TWA	100 ppm TWA; 600 mg/m3 TWA
(Proprietary)	STELs	150 ppm STEL	150 ppm STEL; 900 mg/m3 STEL	Not established

Exposure controls

Engineering Measures/Controls

 Good general ventilation 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. Use only appropriately classified electrical equipment.

Personal Protective Equipment

Respiratory

 In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

Wear chemical splash safety goggles.

Skin/Body

Wear appropriate gloves.

Environmental Exposure Controls

Controls should be engineered to prevent release to the environment, including
procedures to prevent spills, atmospheric release and release to waterways. Follow
best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Amber liquid with a solvent odor.
Color	Amber	Odor	Solvent
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	-40 F(-40 C)
Decomposition Temperature	> 212 F(> 100 C)	рН	No data available
Specific Gravity/Relative Density	= 0.86 Water=1	Water Solubility	Negligible < 0.1 %

Viscosity	4 Centistoke (cSt, cS) or mm2/sec	1	
Volatility			
Vapor Pressure	0.035 mmHg (torr)	Vapor Density	4.5 Air=1
Evaporation Rate	< 1 n-Butyl Acetate = 1	VOC (Wt.)	100 %
VOC (Vol.)	100 %	Volatiles (Wt.)	100 %
Volatiles (Vol.)	100 %		
Flammability	-		
Flash Point	170 F(76.6667 C) CC (Closed Cup)	UEL	5.5 %
LEL	0.6 %	Autoignition	215 C(419 F)
Flammability (solid, gas)	No data available		

Section 10: Stability and Reactivity

Reactivity

• No dangerous reaction known under conditions of normal use.

Chemical stability

· Stable under normal temperatures and pressures.

Possibility of hazardous reactions

· Hazardous polymerization will not occur.

Conditions to avoid

• Keep away from heat, sparks, and flame. Incompatible materials.

Incompatible materials

· Strong oxidants.

Hazardous decomposition products

 Decomposes with heat. Hazardous gases/vapors produced are oxides of nitrogen and carbon monoxide. Decomposition temperature is >212°F.

Section 11 - Toxicological Information

Information on toxicological effects

	Components			
2-Ethylhexyl nitrate (0% TO 24%)	27247-96- 7	Acute Toxicity: Ingestion/Oral-Rat LD50 • >10 mL/kg; Skin-Rabbit LD50 • >5 mL/kg; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 2800 mg/kg 28 Day(s)-Continuous; Liver:Changes in liver weight; Kidney, Ureter, and Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis); Kidney, Ureter, and Bladder:Other changes in urine composition		
Solvent naphtha (0% TO 6%)	64742-94- 5	Acute Toxicity: Inhalation-Rat LC50 • >590 mg/m³ 4 Hour(s); Skin-Rabbit LD50 • >2 mL/kg; Behavioral:Somnolence (general depressed activity); Behavioral:Changes in motor activity (specific assay); Behavioral:Irritability; Irritation: Skin-Rabbit • 500 µL 24 Hour(s) • Mild irritation		
1,2,4-Trimethylbenzene (0% TO 4%)	95-63-6	Acute Toxicity: Ingestion/Oral-Rat LD50 • 5 g/kg; Inhalation-Rat LC50 • 18000 mg/m³ 4 Hour(s); Multi-dose Toxicity: Inhalation-Rat TCLo • 100 ppm 6 Hour(s) 20 Day(s)-Intermittent; Behavioral:Changes in motor activity (specific assay); Behavioral:Analgesia; Behavioral:Alteration of operant conditioning; Inhalation-Rat TCLo • 20 mg/m³ 16 Week(s)-Continuous; Kidney, Ureter, and Bladder:Other changes in urine composition		
		Acute Toxicity: Ingestion/Oral-Rat LD50 • 490 mg/kg; Ingestion/Oral-Mouse TDLo • 158 mg/kg; Brain and Coverings:Other degenerative changes; Liver:Other changes; Biochemical:Metabolism (intermediary):Lipids, including transport; Inhalation-Human TCLo • 250 mg/m³; Sense Organs and Special Senses:Eye:Lacrimation; Behavioral:Headache; Skin-Rabbit LD50 • >20 g/kg; Unreported-		

Naphthalene (0% TO 0.499%)	91-20-3	Guinea Pig LD50 • 1200 mg/kg; Behavioral:Somnolence (general depressed activity); Irritation: Skin-Rabbit • 0.05 mL 24 Hour(s) • Severe irritation; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 500 mg/kg 10 Day(s)-Intermittent; Behavioral:Sleep; Lungs, Thorax, or Respiration:Dyspnea; Ingestion/Oral-Rat TDLo • 4500 mg/kg 10 Day(s)-Intermittent; Brain and Coverings:Other degenerative changes; Mutagen: Specific locus test • Inhalation-Rat • 30 ppm 13 Week(s)-Intermittent; Micronucleus test • Unreported Route-Human • Lymphocyte (Somatic cell) • 30 mg/L; Reproductive: Ingestion/Oral-Mouse TDLo • 2400 mg/kg (7-14D preg); Reproductive Effects:Effects on Newborn:Live birth index; Reproductive Effects:Effects on Newborn:Viability index (e.g., # alive at day 4 per # born alive); Ingestion/Oral-Rat TDLo • 4500 mg/kg (6-15D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Other developmental abnormalities; Tumorigen / Carcinogen: Inhalation-Mouse TCLo • 30 ppm 6 Hour(s) 2 Year(s)-Intermittent; Tumorigenic:Neoplastic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Inhalation-Rat TCLo • 1575 mg/kg 105 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors; Inhalation-Rat TCLo • 60 ppm 6 Hour(s) 105 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors
Solvent naphtha (petroleum), light aromatic (0% TO 3.7%)	64742-95- 6	Acute Toxicity: Ingestion/Oral-Rat LD50 • 8400 mg/kg; Behavioral:Somnolence (general depressed activity); Behavioral:Tremor; Lungs, Thorax, or Respiration:Other changes; Irritation: Eye-Rabbit • 100 µL 24 Hour(s) • Mild irritation; Reproductive: Inhalation-Rat TCLo • 1500 ppm (9W male/9W pre-16D post); Reproductive Effects:Effects on Newborn:Growth statistics (e.g., reduced weight gain)
1,3,5-Trimethylbenzene (0% TO 0.6%)	108-67-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • 5000 mg/kg; Inhalation-Rat LC50 • 24000 mg/m³ 4 Hour(s); Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Rat TCLo • 100 ppm 6 Hour(s) 20 Day(s)-Intermittent; Behavioral:Changes in motor activity (specific assay); Behavioral:Analgesia; Behavioral:Alteration of operant conditioning; Inhalation-Rat TCLo • 20 mg/m³ 16 Week(s)-Continuous; Kidney, Ureter, and Bladder:Other changes in urine composition
1,2,3-Trimethylbenzene (0% TO 0.6%)	526-73-8	Multi-dose Toxicity: Inhalation-Rat TCLo • 100 ppm 6 Hour(s) 20 Day(s)-Intermittent; Behavioral:Alteration of classical conditioning
1-Methylethylbenzene (0% TO 0.12%)	98-82-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • 1400 mg/kg; Gastrointestinal:Gastritis; Inhalation-Rat LC50 • 39000 mg/m³ 4 Hour(s); Inhalation-Human TCLo • 200 ppm; Behavioral:Somnolence (general depressed activity); Behavioral:Antipsychotic; Behavioral:Irritability; Inhalation-Mouse TCLo • 5150 mg/m³ 2 Hour(s); Behavioral:General anesthetic; Inhalation-Rat TCLo • 300 ppm 30 Minute(s); Lungs, Thorax, or Respiration:Respiratory depression; Skin-Rabbit LD50 • 12300 μL/kg; Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 100 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Mouse TCLo • 2000 mg/m³ 14 Week(s)-Continuous; Behavioral:Somnolence (general depressed activity); Inhalation-Rabbit TCLo • 10000 mg/m³ 2 Hour (s) 24 Week(s)-Intermittent; Lungs, Thorax, or Respiration:Acute pulmonary edema; Blood:Hemorrhage; Blood:Changes in leucocyte (WBC) count; Inhalation-Rat TCLo • 1200 ppm 6 Hour(s) 13 Week(s)-Intermittent; Sense Organs and Special Senses:Eye:Other; Behavioral:Changes in motor activity (specific assay); Blood:Pigmented or nucleated red blood cells; Mutagen: Mutation in microorganisms • Unreported Route-Salmonella typhimurium • 100 μg/plate 3 Hour(s) (-S9)
Xylene (0% TO 0.5%)	1330-20-7	Acute Toxicity: Ingestion/Oral-Rat LD50 • 4300 mg/kg; Liver:Other changes; Kidney, Ureter, and Bladder:Other changes; Inhalation-Rat LC50 • 5000 ppm 4 Hour(s); Inhalation-Human TCLo • 200 ppm; Sense Organs and Special Senses:Olfaction:Other changes; Sense Organs and Special Senses:Eye:Conjunctive irritation; Lungs, Thorax, or Respiration:Other changes; Skin-Rabbit LD50 • >1700 mg/kg; Irritation: Eye-Rabbit • 5 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Rat TCLo • 1000 ppm 6 Hour(s) 8 Day(s)-Intermittent; Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain; Reproductive: Inhalation-Rabbit TCLo • 1 g/m³ 24 Hour(s)(7-20D preg); Reproductive Effects:Effects on Fertility:Abortion; Inhalation-Rat TCLo • 50 mg/m³ 6 Hour(s)(1-21D preg); Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity

Abnormalities: Craniofacial (including nose and tongue); Inhalation-Rat TDLo •		(except death, e.g., stunted fetus); Reproductive Effects: Specific Developmental Abnormalities: Craniofacial (including nose and tongue); Inhalation-Rat TDLo • 200 ppm 6 Hour(s)(4-20D preg); Reproductive Effects: Specific Developmental Abnormalities: Musculoskeletal system; Reproductive Effects: Effects on Newborn: Behavioral
Proprietary (<= 10%)		Acute Toxicity: Ingestion/Oral-Rat LD50 • 5400 μL/kg; Skin-Rabbit LD50 • 10 mL/kg; Irritation: Eye-Human • 8 mg • Mild irritation; Skin-Rabbit • 500 mg-Open • Mild irritation

GHS Properties	Classification
Respiratory sensitization	OSHA HCS 2012 • No data available
Serious eye damage/Irritation	OSHA HCS 2012 • No data available
Acute toxicity	OSHA HCS 2012 • No data available
Aspiration Hazard	OSHA HCS 2012 • Aspiration 1
Carcinogenicity	OSHA HCS 2012 • Carcinogenicity 2
Skin corrosion/Irritation	OSHA HCS 2012 • No data available
Skin sensitization	OSHA HCS 2012 • No data available
STOT-RE	OSHA HCS 2012 • No data available
STOT-SE	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
Toxicity for Reproduction	OSHA HCS 2012 • Toxic to Reproduction 1B
Germ Cell Mutagenicity	OSHA HCS 2012 • No data available

Potential Health Effects

Inhalation

Acute (Immediate)

- May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.
- **Chronic (Delayed)**

· No data available.

Skin

Acute (Immediate)

Chronic (Delayed)

Material is classified as non-irritant and non-corrosive using GHS criteria.

No data available.

Eye

Acute (Immediate)

Material is classified as non-irritant using GHS criteria.

Chronic (Delayed)

No data available.

Ingestion

Acute (Immediate)

 Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.

Chronic (Delayed)

· No data available.

Carcinogenic Effects

Suspected of causing cancer. This product contains components that are considered carcinogenic by OSHA, IARC, NTP.

Carcinogenic Effects				
CAS IARC NTP				
1-Methylethylbenzene	98-82-8	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen	
Naphthalene	91-20-3	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen	

Reproductive Effects

· Animal tests for components have shown adverse reproductive effects.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

Toxicity

 Non-mandatory section - information about this substance not complied for this reason.

Persistence and degradability

Non-mandatory section - information about this substance not complied for this reason.

Bioaccumulative potential

Non-mandatory section - information about this substance not complied for this reason.

Mobility in Soil

Non-mandatory section - information about this substance not complied for this reason.

Other adverse effects

Non-mandatory section - information about this substance not complied for this reason.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA Hazard Classifications • Acute, Chronic, Fire

Inventory			
Component	CAS	TSCA	

1,2,3- Trimethylbenzene	526-73-8	Yes
1,2,4- Trimethylbenzene	95-63-6	Yes
1,3,5- Trimethylbenzene	108-67-8	Yes
1- Methylethylbenzene	98-82-8	Yes
Proprietary	Proprietary	Yes
Distillates (petroleum), hydrotreated light	64742-47-8	Yes
Naphthalene	91-20-3	Yes
2-Ethylhexyl nitrate	27247-96-7	Yes
Solvent naphtha	64742-94-5	Yes
Solvent naphtha (petroleum), light aromatic	64742-95-6	Yes
Xylene	1330-20-7	Yes

United States

Labor			
U.S OSHA - Process Safety Management - Highly Hazardous Chemica			
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed	
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed	
Naphthalene	91-20-3	Not Listed	
1-Methylethylbenzene	98-82-8	Not Listed	
Proprietary	Proprietary	Not Listed	
Xylene	1330-20-7	Not Listed	
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed	
 Solvent naphtha (petroleum), light aromatic 	64742-95-6	Not Listed	
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed	
Solvent naphtha	64742-94-5	Not Listed	
2-Ethylhexyl nitrate	27247-96-7	Not Listed	
U.S OSHA - Specifically Regulated Chemicals			
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed	
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed	
Naphthalene	91-20-3	Not Listed	
1-Methylethylbenzene	98-82-8	Not Listed	
Proprietary	Proprietary	Not Listed	
• Xylene	1330-20-7	Not Listed	
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed	
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed	
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed	
Solvent naphtha	64742-94-5	Not Listed	
2-Ethylhexyl nitrate	27247-96-7	Not Listed	
- , - , - 			

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed

• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	
1-Methylethylbenzene	98-82-8	
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	(isomers and mixtures)
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
IIS CAA (Clean Air Act) Accidental Balance Broventian Flammable Substance		
 U.S CAA (Clean Air Act) - Accidental Release Prevention - Flammable Substanc Distillates (petroleum), hydrotreated light 	64742-47-8	Not Listed
	526-73-8	Not Listed
• 1,2,3-Trimethylbenzene	91-20-3	
Naphthalene Methylethylbograps	91-20-3	Not Listed Not Listed
• 1-Methylethylbenzene		
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S CAA (Clean Air Act) - Accidental Release Prevention - Toxic Substances		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
• Naphthalene	91-20-3	Not Listed
1-Methylethylbenzene	98-82-8	Not Listed
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
2-Lutymexyr mudic	21241-30-1	Not Elsted
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	100 lb final RQ; 45.4 kg final RQ
• 1-Methylethylbenzene	98-82-8	5000 lb final RQ; 2270 kg final RQ
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	100 lb final RQ; 45.4 kg final RQ
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		

Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
1-Methylethylbenzene	98-82-8	Not Listed
 Proprietary 	Proprietary	Not Listed
Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
 Solvent naphtha (petroleum), light aromatic 	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S. OFFICIALOADA O. 11. 040 F D. 11.		
U.S CERCLA/SARA - Section 313 - Emission Reporting	04740 47 0	Not Listed
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	0.1 % de minimis concentration
1-Methylethylbenzene	98-82-8	1.0 % de minimis concentration
Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	1.0 % de minimis concentration
• 1,2,4-Trimethylbenzene	95-63-6	1.0 % de minimis
Calvent negleting (netrology) light aromatic	64740.05.6	concentration
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha The decorate reference to the second reference to the	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
1-Methylethylbenzene	98-82-8	Not Listed
 Proprietary 	Proprietary	Not Listed
Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed

J.S CWA (Clean Water Act) - Hazardous Substances Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
1,2,3-Trimethylbenzene	526-73-8	Not Listed
	91-20-3	NOI LISIEU
Naphthalene		Not Listed
1-Methylethylbenzene	98-82-8	Not Listed
Proprietary	Proprietary	Not Listed
Xylene	1330-20-7	
1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
J.S CWA (Clean Water Act) - Toxic Pollutants		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	
1-Methylethylbenzene	98-82-8	Not Listed
Proprietary	Proprietary	Not Listed
Xylene	1330-20-7	Not Listed
1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
	108-67-8	Not Listed
1,3,5-Trimethylbenzene Solvent naphtha	64742-94-5	Not Listed

United States - California

Environment		
U.S California - Proposition 65 - Carcinogens List		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	carcinogen, initial date 4/19/02
• 1-Methylethylbenzene	98-82-8	carcinogen, initial date 4/6/10
• Proprietary	Proprietary	Not Listed
Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
 Solvent naphtha (petroleum), light aromatic 	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Proprietary	Proprietary	Not Listed
Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed

U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)	64740 47 0	Not Listed
Distillates (petroleum), hydrotreated light	64742-47-8 526-73-8	Not Listed Not Listed
1,2,3-TrimethylbenzeneNaphthalene	91-20-3	Not Listed
	98-82-8	Not Listed
1-Methylethylbenzene Proprietory		
Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	5.8 μg/day NSRL
1-Methylethylbenzene	98-82-8	Not Listed
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male	04740 47 0	Not Listed
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
1-Methylethylbenzene Respiratory	98-82-8	Not Listed
Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed

Other Information

 WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Revision Date

Preparation Date

Other Information

Disclaimer/Statement of Liability

- 16/October/2015
- 16/October/2015
- Schedule B Number: 3811.19.0000.
- Information presented herein is believed to be factual, as it has been derived from the
 works and opinions of persons believed to be qualified experts. However, nothing
 contained in this information is to be taken as warranty or representation for which the
 Gold Eagle Co. bears legal responsibility. The user should review any
 recommendations in the specific context of the intended use to determine whether
 they are appropriate.

Key to abbreviations NDA = No Data Available

POWER SERVICE PRODUCTS, INC. SAFETY DATA SHEET



SECTION 1 - IDENTIFICATION

PRODUCT NAME: DIESEL FUEL SUPPLEMENT +CETANE BOOST

Unless otherwise noted, all sections of this SDS apply to each of the following products and part numbers.

PART NUMBERS:

1:400 Treatment Ratio	1016-06, 1016-09, 1025-06, 1025-09, 1025-12, 1080-06, 11016-06, 11016-09, 11025-06, 11025-12, 11080-06
1:1,000 Treatment Ratio	1000, 1128-04, 1060-01
1:1,500 Treatment Ratio	1050-02, 1055-01, 1260-01

COMPANY IDENTIFICATION:

Power Service Products, Inc.

P.O. Box 1089

Weatherford, TX 76086

Email: psp@powerservice.com

Phone: 800-643-9089 or 817-599-9486

Fax: 817-599-4893

Emergency Phone Number: Within USA 1-800-424-9300. Outside USA 001-703-527-3887

(Call Collect).

RECOMMENDED USES: Diesel fuel additive

SECTION 2 – HAZARD(S) IDENTIFICATION

CLASSIFICATION UNDER 29 CFR 1910.1200(d)

(NC=product does not meet classification criteria)

	1:400	1:1000	1:1500
	Treatment	Treatment	Treatment
	Ratio	Ratio	Ratio
Health Hazard Criteria	Category	Category	Category
Acute Toxicity, Oral:	NC	NC	NC
Acute Toxicity, Dermal:	NC	NC	NC
Acute Toxicity, Inhalation, Vapors:	3	3	3

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	1:400 Treatment Ratio	1:1000 Treatment Ratio	1:1500 Treatment Ratio
Health Hazard Criteria	Category	Category	Category
Skin Corrosion/Irritation:	2	2	2
Serious Eye Damage/Eye Irritation:	2	2	2
Respiratory Sensitization:	NC	NC	NC
Skin Sensitization:	NC	NC	NC
Germ Cell Mutagenicity:	NC	NC	NC
Carcinogenicity:	2	2	2
Reproductive Toxicity:	NC	NC	NC
Specific Target Organ Toxicity, Single Exposure:	3	3	3
Specific Target Organ Toxicity, Repeated or Prolonged Exposure:	NC	NC	NC
Aspiration Hazard:	1	1	1

	1:400 Treatment Ratio	1:1000 Treatment Ratio	1:1500 Treatment Ratio
Physical Properties Criteria	Category	Category	Category
Explosives:	NC	NC	NC
Flammable Gases:	NC	NC	NC
Flammable Aerosols:	NC	NC	NC
Oxidizing Gases:	NC	NC	NC
Gases Under Pressure:	NC	NC	NC
Flammable Liquids:	3	3	3
Flammable Solids:	NC	NC	NC
Self-Reactive Chemicals:	NC	NC	NC
Pyrophoric Liquids:	NC	NC	NC
Pyrophoric Solids:	NC	NC	NC
Self-Heating Chemicals:	NC	NC	NC
Chemicals Which, in Contact with Water, Emit Flammable Gases:	NC	NC	NC
Oxidizing Liquids:	NC	NC	NC
Oxidizing Solids:	NC	NC	NC
Organic Peroxides:	NC	NC	NC
Corrosive to Metals:	NC	NC	NC

LABEL SIGNAL WORD, HAZARD STATEMENTS, SYMBOLS AND PRECAUTIONARY **STATEMENTS UNDER 29 CFR 1910.1200(f):**

Please see the Note regarding product labeling in Section 16.

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	1:400	1:1000	1:1500
	Treatment	Treatment	Treatment
	Ratio	Ratio	Ratio
Signal Word	Danger	Danger	Danger

Hazard Statement(s): Flammable liquid and vapor. Toxic if inhaled. May be fatal if swallowed and enters airways. Harmful if swallowed. Causes skin and serious eye irritation. May cause respiratory irritation and drowsiness or dizziness.

Symbols: The following symbols are for all treatment ratios.









Precautionary Statement(s): Keep away from sparks and open flames. No smoking. Keep container tightly closed. Use only non-sparking tools. Ground/Bond container and receiving equipment. Use explosion-proof pumps when pumping. Take precautionary measures against static discharge. Avoid breathing vapors. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and eye protection. Store locked up and in cool, well ventilated place. KEEP OUT OF REACH OF CHILDREN.

Hazards Not Otherwise Classified: None

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

The specific chemical identity and exact concentration percentage has been withheld as a Trade Secret. Specific chemical information will be made available to health professionals in accordance with 29 CFR 1910.1200.

INGREDIENTS CLASSIFIED AS HEALTH HAZARDS

TREATMENT RATIO 1:400						
	Common					
Chemical Name	Name/Synonyms	CAS Number	Concentration (%)			
Petroleum Distillates	Trade secret	Trade secret	50 - 90			
Hydroxy alkoxylate	Trade secret	Trade secret	4 - 10			
Alkyl Nitrates	Trade secret	Trade secret	2 - 6			
Naphthalene	Not available	91-20-3	0.05 - 0.2			

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TREATMENT RATIO 1:1000						
Chemical Name	Common Name/Synonyms	CAS Number	Concentration (%)			
Petroleum Distillates	Trade secret	Trade secret	40 - 90			
Alkyl Nitrates	Trade secret	Trade secret	5 - 15			
Aromatic Hydrocarbons	Trade secret	Trade secret	2 - 5			
Hexan-1-ol, 2-ethyl	Trade secret	Trade secret	1 - 4			
Naphthalene	Not available	91-20-3	0.1 – 0.5			

TREATMENT RATIO 1:1500						
Chemical Name	Common Name/Synonyms	CAS Number	Concentration (%)			
Petroleum Distillates	Trade secret	Trade secret	20 - 55			
Alkyl Nitrates	Trade secret	Trade secret	10 – 20			
Aromatic Hydrocarbons	Trade secret	Trade secret	3 - 8			
Hexan-1-ol, 2-ethyl	Trade secret	Trade secret	2 – 5			
Naphthalene	Not available	91-20-3	0.2 - 0.9			

SECTION 4 - FIRST AID MEASURES

As a precaution, exposure to liquids, vapors, mists and fumes should be minimized.

EYE CONTACT: 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.

SKIN CONTACT: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs get medical advice/attention.

INHALATION: Remove person to fresh air and keep comfortable for breathing. Call a doctor.

INGESTION: If swallowed, IMMEDIATELY call a doctor. Do NOT induce vomiting.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water fog, alcohol-resistant foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

SPECIFIC HAZARDS: Vapors are heavier than air and may travel along the ground to a distant ignition source and flash back. See Section 10 for Stability and Reactivity. **NOTE:** EMPTY CONTAINERS CONTAIN COMBUSTIBLE VAPORS THAT CAN CAUSE FLASH FIRES OR EXPLOSIONS. CONTAINERS ARE SINGLE-TRIP CONTAINERS AND SHOULD NOT BE USED FOR ANY REASON AFTER BEING EMPTIED. DO NOT USE CUTTING TORCH

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EQUIPMENT OR ANY OTHER FLAME OR OTHER SOURCES OF IGNITION ON ANY EMPTY CONTAINER.

PROTECTIVE EQUIPMENT AND PRECAUTIONS: Use standard protective equipment including self-contained breathing apparatus (SCBA).

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PROCEDURES: Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas. Eliminate all sources of ignition in the vicinity of the spill or released vapor. See Section 2 for Hazards Identification. See Section 4 for First Aid Measures. See Section 5 for Fire Fighting Information. See Section 8 for Personal Protective Equipment.

SPILL CONTAINMENT AND CLEAN-UP: Eliminate potential sources of ignition. Stop leak if it can be done without risk. Dike and contain spill. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly. A vapor suppressing foam may be used to reduce vapors. Local, state and federal laws and/or regulations may apply to releases and disposal of this material, as well as those materials and items employed in the clean-up releases. The user/responder will need to determine which local, state and federal laws and/or regulations are applicable. The National Response Center can be reached at 1-800-424-8802.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Avoid contact with eyes and skin. Use only with adequate ventilation. Use proper bonding and/or grounding procedures. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Keep away from ignition sources such as heat, sparks, and flames. No smoking.

CONDITIONS FOR SAFE STORAGE: DO NOT USE OR STORE near heat, sparks, or flame. USE AND STORE ONLY IN A WELL-VENTILATED AREA. Handle containers with care. Keep container tightly closed when not in use. Store locked up.

STORAGE TEMPERATURE:

Treatment Ratio	Part Numbers:	Storage Temperature:
1:400 Treatment Ratio	1016-06, 1016-09, 1025-06, 1025-12, 1080-06, 11016-06, 11016-09, 11025-06, 11025-12, 11041-04, 11080-06	-20°F to 104°F (-29°C to 40°C)
1:1,000 Treatment Ratio	1000, 1128-04, 1060-01	0°F to 104°F (-18°C to 40°C)

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1:1,500 Treatment	1050-02, 1055-01, 1260-01	10°F to 104°F
Ratio		(-12°C to 40°C)

EMPTY CONTAINER WARNING: EMPTY CONTAINERS MAY CONTAIN COMBUSTIBLE VAPORS AND CAN BE DANGEROUS. SEE SECTION 5 FOR FIRE AND EXPLOSION HAZARD DATA.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

		OSHA	ACGIH			NIOSH		
	CAS#	PEL	TLV	STEL	REL	STEL	IDLH	Note
Ethylbenzene	100-41-4	100 ppm	20 ppm	not est.	100 ppm	125 ppm	800 ppm (LEL)	n/a
Naphthalene	91-20-3	10 ppm	10 ppm	not est.	10 ppm	15 ppm	250 ppm	skin
Petroleum Distillates	n/a	500 ppm	not est.	n/a				
Cumene	98-82-8	50 ppm	50 ppm	not est.	50 ppm	not est.	900 ppm (LEL)	Skin
Toluene	108-88-3	100 ppm	20 ppm	not est.	100 ppm	150 ppm	500 ppm	Skin
Hydroxy Alkoxylate	Proprietary	50 ppm	20 ppm	not est.	5 ppm	not est.	not est.	skin

ENGINEERING CONTROLS: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Local exhaust ventilation is recommended to control exposure.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Eyes and Face: Eye protection such as safety glasses or chemical goggles is recommended if contact is likely.

Skin: Protective chemical/oil resistant gloves are recommended. Wear additional protective clothing as appropriate.

Respiratory: Wear a NIOSH/MSHA approved respirator as necessary.

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. Practice good housekeeping.

NOTE: These precautions are for room temperature handling.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

	1:400 Treatment Ratio	1:1000 Treatment Ratio	1:1500 Treatment Ratio
Appearance	Liquid, brown	Liquid, brown	Liquid, brown
Odor	Aromatic solvent	Aromatic solvent	Aromatic solvent
Odor Threshold	Not available	Not available	Not available
рН	7 – 8 (slightly basic)	7 – 8 (slightly basic)	7 – 8 (slightly basic)
Melting point/Freezing point	Not available	Not available	Not available
Initial Boiling Point and Boiling Range	300°F (149°C)	300°F (149°C)	300°F (149°C)
Flash Point	105°F (40.5°C)	116°F (46.6°C)	121°F (49.4°C)
Evaporation Rate	Not available	Not available	Not available
Flammability	Not available	Not available	Not available
Upper / lower Flammability or Explosive Limits	Not available	Not available	Not available
Vapor Pressure	0.2 - 0.95	0.2 - 0.95	0.2 - 0.95
Vapor Density	>5.0	>5.0	>5.0
Relative Density/Specific Gravity (at 60°F)	0.910	0.912	0.896
Solubility	Not available	Not available	Not available
Partition Coefficient; n-octanol / water	Not available	Not available	Not available
Auto-ignition Temperature	Not available	Not available	Not available
Decomposition temperature	Not available	Not available	Not available
Viscosity	Not available	Not available	Not available
Pour Point	-55°F (-48°C)	-30°F (-34°C)	-15°F (-26°C)

SECTION 10 - STABILITY AND REACTIVITY

REACTIVITY: see Incompatible Materials below

CHEMICAL STABILITY: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

POSSIBILITY OF HAZARDOUS REACTION: Hazardous polymerization will not occur.

CONDITIONS TO AVOID: Flames, high energy ignition sources, and elevated temperatures.

INCOMPATIBLE MATERIALS: May react with strong oxidizing agents, such as; chlorates, nitrates, peroxides, nitrogen oxides, sulfur oxides, etc.; alkalis; nitric acid; sulfuric acid; aluminum; brass; copper; reducing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides, products of incomplete combustion.

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SECTION 11 - TOXICOLOGICAL INFORMATION

LIKELY ROUTES OF EXPOSURE

	INGESTION	INHALATION	SKIN CONTACT	EYE CONTACT	SKIN ABSORPTION
1:400 Treatment Ratio		Х	Х	Х	Х
1:1000 Treatment Ratio		Х	Х	Х	Х
1:1500 Treatment Ratio		Χ	Х	Х	Х

SYMPTOMS RELATED TO PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS: Breathing of high vapor concentrations may cause dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness. The vapor or fumes from this material may cause respiratory irritation. Breathing this material at elevated concentrations causes central nervous system effects. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred vision, drowsiness, confusion or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors, or convulsions, loss of consciousness, coma or death.

DELAYED AND IMMEDIATE EFFECTS AND CHRONIC EFFECTS FROM SHORT- AND LONG-TERM EXPOSURE: Repeated skin exposure to a component of this product may cause irritation, even a burn; may cause a more severe response on covered skin, such as under clothing or gloves. Inhalation exposure to a component of this product has caused fetotoxicity in the presence of maternal toxicity in animals.

NUMERICAL MEASURES OF TOXICITY

Note: the information provided below are estimates; testing of the product is not available.

Treatment Ratio	Acute Oral Toxicity (ATE _{mix} estimate)	Acute Dermal Toxicity (ATE _{mix} estimate)	Acute Inhalation (ATE _{mix} estimate)
1:400 Treatme Ratio		Does not meet criteria	7.10 (vapors)
1:1,000 Treatme Ratio	Does not meet criteria	Does not meet criteria	8.56 (vapors)
1:1,500 Treatme Ratio	Does not meet criteria	Does not meet criteria	7.48 (vapors)

SENSITIZATION: No information available.

MUTAGENICITY: No information available.

CARCINOGENICITY LISTINGS – the following chemicals are listed as indicated:

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Chemical	List
Cumene	IARC, NTP
Ethylbenzene	IARC
Naphthalene	IARC, NTP

REPODUCTIVE TOXICITY: No information available.

TERATOGENICITY/EMBRYOTOXICITY: Hydroxy Alkoxylate has caused fetotoxicity with maternal toxicity. This product contains a component of a complex mixture (Xylenes (1330-20-7)) that has been shown to cause teratogenicity and/or embryotoxicity.

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): Respiratory tract irritation, drowsiness/dizziness.

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): No information available

ASPIRATION HAZARD: Aspiration hazard identified.

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY: This material is expected to be toxic to aquatic organisms.

PERSISTENCE AND DEGRADABILITY: No information available.

BIOACCUMULATIVE POTENTIAL: No information available.

MOBILITY IN SOIL: No information available.

OTHER ADVERSE EFFECTS: No information available.

SECTION 13 - DISPOSAL CONSIDERATIONS

RCRA Information: Disposal of unused product may be subject to RCRA hazardous waste regulations (40 CFR Part 261). Disposal of the used product may also be regulated as hazardous waste due to resulting mixture characteristics, mixture components or product use. Such changes to the product may result in different and/or additional hazardous waste codes. Potential RCRA waste code based on the product as shipped: D001 IGNITABILITY

State or local laws may impose additional regulatory requirements regarding disposal. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

EMPTY CONTAINER WARNING: EMPTY CONTAINERS MAY CONTAIN COMBUSTIBLE VAPORS AND CAN BE DANGEROUS. SEE SECTION 5 FOR FIRE AND EXPLOSION

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HAZARD DATA. Dispose or recycle empty containers appropriately per local, state and federal regulations.

SECTION 14 - TRANSPORTATION INFORMATION

The following part numbers are not regulated by DOT:

1:400 Treatment Ratio	1016-06, 1016-09, 1025-06, 1025-09, 1025-12,
	1080-06, 11016-06, 11016-09, 11025-06,
	11025-12, 1080-06
1:1,000 Treatment Ratio	1128-04
1:1,500 Treatment Ratio	1050-02, 1055-01

The following part numbers are regulated by DOT:

1:1,000 Treatment Ratio	1060-01

PROPER SHIPPING NAME: Combustible Liquid, N.O.S., (Petroleum Distillates) Marine

Pollutant (2-Ethylhexyl Nitrate)

HAZARD CLASS: Combustible Liquid

I.D. NUMBER: NA 1993
PACKING GROUP: III

PLACARDING: Combustible Liquid

MARINE POLLUTANT: Yes

1:1,000 Treatment Ratio	1000

PROPER SHIPPING NAME: Combustible Liquid, N.O.S., (Petroleum Distillates) Marine

Pollutant (2-Ethylhexyl Nitrate) RQ (Xylene, Naphthalene)

HAZARD CLASS: Combustible Liquid

I.D. NUMBER: NA 1993 PACKING GROUP: III

PLACARDING: Combustible Liquid

MARINE POLLUTANT: Yes

PRODUCT RQ: 100 lbs. (45.45 kg) - Xylene, Naphthalene

1:1,500 Treatment Ratio	1260-01
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PROPER SHIPPING NAME: Combustible Liquid, N.O.S., (Petroleum Distillates) Marine

Pollutant (2-Ethylhexyl Nitrate)

HAZARD CLASS: Combustible Liquid

I.D. NUMBER: NA 1993 PACKING GROUP: III

PLACARDING: Combustible Liquid

MARINE POLLUTANT: Yes

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SECTION 15 - REGULATORY INFORMATION

§14(a) Consumer Product Safety Act General Certificate of Conformity

Power Service Products, Inc. certifies that this product meets the statutory and regulatory requirements of the US Consumer Products Safety Act, the Federal Hazardous Substances Act, and the Poison Prevention Packaging Act of 1970, as applicable. The Power Service products are manufactured in the United States in Weatherford, Texas, unless otherwise indicated on the product label. The product manufacture lot code is stamped on the product container. This Certification is based upon a reasonable testing program conducted by Power Service Products, Inc. which includes a quality control program incorporating, as necessary, confirmation of compliance by component suppliers. Third-party testing is not required to certify compliance. Further details may be obtained by contacting the Power Service Products, Inc. EHS Manager at 1-800-643-9089.

Contents of this SDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA STATUS:

All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.

EPA SARA TITLE III CHEMICAL LISTINGS:

Section 302 Extremely Hazardous Substances: None

Sections 311/312 Hazard Class:

Acute Health Effects: Yes Sudden Release of Pressure Hazard: No.

Chronic Health Effects: Yes Reactivity Hazard: No

Fire Hazard: Yes

NFPA (NATIONAL FIRE PROTECTION ASSOCIATION) RATING:

HEALTH: 2 FIRE: 2

REACTIVITY: 0

Section 313:

Specific chemical information is being withheld as a Trade Secret. The following chemicals subject to the reporting requirements of EPCRA Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (40 CFR Part 372) may be present in this product at a concentration that does not exceed the specified upper weight percentage.

Treatment Ratio	CAS Number	Chemical Name	Max %
1:400 Treatment Ratio	100-41-4	Ethylbenzene	24.0
	NA	Glycol Ether Category	8.0

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Treatment Ratio	CAS Number	Chemical Name	Max %
	91-20-3	Naphthalene	1.0
	98-82-8	Cumene	4.0
	108-88-3	Toluene	4.0
1:1000 Treatment Ratio	100-41-4	Ethylbenzene	19.0
	91-20-3	Naphthalene	1.0
	98-82-8	Cumene	3.5
	108-88-3	Toluene	3.5
1:1,500 Treatment Ratio	100-41-4	Ethylbenzene	12.0
	91-20-3	Naphthalene	1.0
	98-82-8	Cumene	2.0
	108-88-3	Toluene	2.0

State or local laws may impose additional regulatory requirements for components of this material. It is the responsibility solely of the Employer to maintain compliance with State and Local reporting.

This product contains a chemical known to the state of California to cause cancer and/or birth defects or other reproductive harm: ethylbenzene, toluene, cumene, naphthalene.

SECTION 16 – OTHER INFORMATION

DATE OF PREPARATION / REVISION: September 28, 2015

NOTE regarding product labeling: The OSHA Hazard Communication Standard applies to hazardous chemicals known to be present in the workplace. However, the labeling and Safety Data Sheet requirements do not apply to consumer products when they are used in the workplace for the purposes intended by the manufacturer and the use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the intended purpose. Power Service Products intends for product packaged in 1 gallon or smaller containers to be used by consumers and has labeled those containers as required under the Consumer Product Safety Commission regulations. Power Service Products intends for product packaged in containers larger than 1 gallon to be used in the workplace and has labeled those products as required by the OSHA Hazard Communication Standard. The Consumer Product Safety Commission and OSHA Hazard Communication Standard labeling requirements are different and variations between the consumer and industrial labels may occur. It is the employer's responsibility to purchase the appropriate product for use in the workplace.

The information contained herein is offered in good faith and is believed to be accurate based on the data available to us as of the date of SDS preparation. The information in this document applies to this specific product as supplied. It may not be appropriate for this product if the product is used in combination with other materials. The information in this document is not intended to constitute product performance information. Some of the information presented and conclusions drawn herein are from sources other than direct test data on the product. No statement shall be construed as an endorsement of any product or process. The recommended

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industrial hygiene and safe handling procedures are believed to be valid in the context of the intended use as described in product labeling. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. You are urged to obtain material safety data sheets for all products you buy, process, use or distribute, and are encouraged to advise those who may come in contact with such products of the information contained therein. Regulatory requirements are subject to change and may differ between locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. No warranty or guarantee is expressed or implied with respect to this product, the accuracy and sufficiency of the data or recommendations herein, or the results to be obtained from the use of this product. IN NO EVENT SHALL POWER SERVICE PRODUCTS, INC. BE LIABLE FOR ANY LOSS, CLAIM, DAMAGE OR LIABILITY OF ANY KIND, WHICH MAY ARISE FROM OR IN CONNECTION WITH THE INFORMATION CONTAINED IN THIS DOCUMENT OR FROM THE USE, HANDLING OR STORAGE OF THE PRODUCT BY THE BUYER/USER, WHETHER DIRECT, INDIRECT. OR CONSEQUENTIAL. OR FOR ANY CLAIM BY ANY THIRD PARTY. BEYOND THE PURCHASE PRICE OR REPLACEMENT OF THE PRODUCT IN CONNECTION WITH WHICH SUCH LOSS, CLAIM, DAMAGE OR LIABILITY AROSE.

THE FOREGOING LIMITATIONS APPLY REGARDLESS OF THE CAUSES OR CIRCUMSTANCES GIVING RISE TO SUCH LOSS, CLAIM, DAMAGE OR LIABILITY, EVEN IF SUCH LOSS, CLAIM, DAMAGE, OR LIABILITY IS BASED ON NEGLIGENCE OR OTHER TORTS OR BREACH OF CONTRACT.

Revised: September 28, 2015 Supersedes: May 30, 2015

SAFETY DATA SHEET

1. Identification

Product identifier Fuel Therapy® with Anti-Gel

Other means of identification

Product code 05425, 05455 Recommended use Fuel additive Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

CRC Industries, Inc. Company name

Address 885 Louis Dr.

Warminster, PA 18974 US

Telephone

General Information 215-674-4300 800-521-3168 **Technical**

Assistance

800-272-4620 **Customer Service** 24-Hour Emergency 800-424-9300 (US)

703-527-3887 (International) (CHEMTREC) Website www.crcindustries.com

2. Hazard(s) identification

Physical hazards Flammable liquids Category 3 **Health hazards** Skin corrosion/irritation Category 2

Germ cell mutagenicity Category 2 Carcinogenicity Category 2

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Category 2

Category 3

Specific target organ toxicity, single exposure Category 3 narcotic effects

Aspiration hazard

Category 1

Hazardous to the aquatic environment, acute hazard

Hazardous to the aquatic environment,

long-term hazard

OSHA defined hazards Not classified.

Label elements

Environmental hazards



Signal word Danger

Flammable liquid and vapor. May be fatal if swallowed and enters airways. Causes skin irritation. **Hazard statement**

May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing genetic defects. Suspected of causing cancer. Harmful to aquatic life. Harmful to aquatic life with

long lasting effects.

Material name: Fuel Therapy® with Anti-Gel 05425, 05455 Version #: 01 Issue date: 03-10-2015

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 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. Avoid breathing mist or vapor. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical attention. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. 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.

Storage

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Diesel Fuel No. 2		68476-34-6	60 - 70
Stoddard Solvent		8052-41-3	20 - 30
Solvent naphtha (petroleum), heavy arom.		64742-94-5	5 - 10
1,2,4-Trimethylbenzene		95-63-6	1 - 3
Naphthalene		91-20-3	< 1

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

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact

Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Get medical attention if irritation develops and persists.

Ingestion

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important

symptoms/effects, acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. Direct contact with eyes may cause temporary irritation. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed

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 under observation. Symptoms may be delayed.

General information

Take off all contaminated clothing immediately. 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

Suitable extinguishing media

Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Fire-fighting equipment/instructions

General fire hazards

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

so without risk.

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. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do

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. 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. 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 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

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. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. 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. Store in a cool, dry place out of direct sunlight. Keep container tightly closed. Store in a well-ventilated place. 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 Con Components	taminants (29 CFR 1910.1000) Type	Value	
Naphthalene (CAS 91-20-3)	PEL	50 mg/m3	
		10 ppm	
Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5)	PEL	400 mg/m3	
,		100 ppm	
Stoddard Solvent (CAS 8052-41-3)	PEL	2900 mg/m3	
		500 ppm	
US. ACGIH Threshold Limit Values			
Components	Туре	Value	Form
1,2,4-Trimethylbenzene (CAS 95-63-6)	TWA	25 ppm	

Material name: Fuel Therapy® with Anti-Gel

SDS US 05425, 05455 Version #: 01 Issue date: 03-10-2015

US. ACGIH Threshold Limit Values Components	Туре	Value	Form
Diesel Fuel No. 2 (CAS 68476-34-6)	TWA	100 mg/m3	Inhalable fraction and vapor.
Naphthalene (CAS 91-20-3)	TWA	10 ppm	
Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5)	TWA	200 mg/m3	Non-aerosol.
Stoddard Solvent (CAS 8052-41-3)	TWA	100 ppm	
HO MICOLL BUILT OF THE COLUMN			
US. NIUSH: Pocket Guide to Chem	ical Hazards		
	ical Hazards Type	Value	
Components 1,2,4-Trimethylbenzene	_	Value 125 mg/m3	
Components 1,2,4-Trimethylbenzene	Туре		
Components 1,2,4-Trimethylbenzene (CAS 95-63-6)	Туре	125 mg/m3	
Components 1,2,4-Trimethylbenzene (CAS 95-63-6)	Type TWA	125 mg/m3 25 ppm	
Components 1,2,4-Trimethylbenzene (CAS 95-63-6)	Type TWA	125 mg/m3 25 ppm 75 mg/m3	
Components 1,2,4-Trimethylbenzene (CAS 95-63-6)	Type TWA STEL	125 mg/m3 25 ppm 75 mg/m3 15 ppm 50 mg/m3	
US. NIOSH: Pocket Guide to Chem Components 1,2,4-Trimethylbenzene (CAS 95-63-6) Naphthalene (CAS 91-20-3) Stoddard Solvent (CAS 8052-41-3)	Type TWA STEL	125 mg/m3 25 ppm 75 mg/m3 15 ppm	

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

US ACGIH Threshold Limit Values: Skin designation

Diesel Fuel No. 2 (CAS 68476-34-6)

Naphthalene (CAS 91-20-3)

Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5)

Can be absorbed through the skin.

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. Eye wash facilities and emergency shower must be available when handling this product.

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. Polyvinyl chloride (PVC).

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 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 Dark amber.
Odor Petroleum.
Odor threshold Not available.
pH Not available.

Melting point/freezing point -94 °F (-70 °C) estimated Initial boiling point and boiling 315 °F (157.2 °C) estimated

range

Flash point 140 °F (60 °C) estimated

Evaporation rate Slow.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

0.6 % estimated

(%)

Flammability limit - upper

(%)

7.5 % estimated

Vapor pressure 0.8 hPa estimated

Vapor density > 1 (air = 1)

Relative density 0.84

Solubility (water) Negligible.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 450 °F (232.2 °C) estimated

Decomposition temperature Not available.

Viscosity (kinematic) Not available.

Percent volatile 97.2 % estimated

10. Stability and reactivity

ReactivityThe 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. Avoid temperatures exceeding the

flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Carbon oxides. Hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious

chemical pneumonia.

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting. May cause irritation to the

respiratory system.

Skin contact Causes skin irritation.

Eye contact Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. May cause respiratory irritation. Skin irritation. May cause

redness and pain.

Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways. Narcotic effects. May cause respiratory irritation.

Product Species Test Results

Fuel Therapy® with Anti-Gel

Acute Dermal

LD50 Rabbit 2500 mg/kg estimated

Inhalation

LC50 Rat 457.1383 mg/l, 4 hours estimated

Material name: Fuel Therapy® with Anti-Gel 05425, 05455 Version #: 01 Issue date: 03-10-2015

Product	Species	Test Results
Oral		
LD50	Rat	5614.8232 mg/kg estimated
Chronic		
Oral		
LD50	Mouse	5063.2925 g/kg estimated

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Direct contact with eyes may cause temporary irritation.

Respiratory sensitization Not available.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity Suspected of causing genetic defects.

Suspected of causing cancer. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Diesel Fuel No. 2 (CAS 68476-34-6) 3 Not classifiable as to carcinogenicity to humans.

Naphthalene (CAS 91-20-3) 2B Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Naphthalene (CAS 91-20-3) Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

May cause respiratory irritation. May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Not classified.

May be fatal if swallowed and enters airways. If aspirated into lungs during swallowing or vomiting, **Aspiration hazard**

may cause chemical pneumonia, pulmonary injury or death.

Chronic effects Prolonged exposure may cause chronic effects.

12. Ecological information

cotoxicity	Harmful to	aquatic life with long lasting effects.	
Product		Species	Test Results
Fuel Therapy® with A	nti-Gel		
Aquatic			
Acute			
Crustacea	EC50	Daphnia	2.3952 mg/l, 48 hours estimated
Fish	LC50	Fish	48.7302 mg/l, 96 hours estimated
Components		Species	Test Results
1,2,4-Trimethylbenzer	ne (CAS 95-63-6)		
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	7.19 - 8.28 mg/l, 96 hours
Diesel Fuel No. 2 (CA	S 68476-34-6)		
Aquatic			
Acute			
Fish	LC50	Fathead minnow (Pimephales promelas)	35 mg/l, 96 hours
Naphthalene (CAS 91	-20-3)		
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	1.09 - 3.4 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	1.6 mg/l, 96 hours

Material name: Fuel Therapy® with Anti-Gel 05425, 05455 Version #: 01 Issue date: 03-10-2015 Components Species Test Results

Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5)

Aquatic

Crustacea EC50 Water flea (Daphnia pulex) 2.7 - 5.1 mg/l, 48 hours
Fish LC50 Rainbow trout, donaldson trout 8.8 mg/l, 96 hours

(Oncorhynchus mykiss)

8.8 mg/l, 96 hours

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)

Naphthalene 3.3

Stoddard Solvent 3.16 - 7.15

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 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 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

NON-BULK

Not regulated as dangerous goods by ground.

DOT Air

UN number

UN1268

UN proper shipping name

Petroleum distillates, n.o.s. or Petroleum products, n.o.s.

Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
Packing group III

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions 144, B1, IB3, T4, TP1, TP29

Packaging exceptions150Packaging non bulk203Packaging bulk242

DOT

Maritime

UN number UN1268

UN proper shipping name Petroleum distillates, n.o.s. or Petroleum products, n.o.s.

Transport hazard class(es)

Class 3
Subsidiary risk Label(s) 3
Packing group III

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions 144, B1, IB3, T4, TP1, TP29

Packaging exceptions 150

^{*} Estimates for product may be based on additional component data not shown.

Packaging non bulk 203 Packaging bulk 242

IATA

UN number UN1268

UN proper shipping name Petroleum products, n.o.s.

Transport hazard class(es)

Class 3
Subsidiary risk Packing group III
Environmental hazards No.
ERG Code 3L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo Allowed.

aircraft

Cargo aircraft only Allowed.

IMDG

UN number UN1268

UN proper shipping name PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S.

Transport hazard class(es)

Class 3
Subsidiary risk Packing group III
Environmental hazards

Marine pollutant No. EmS F-E, S-E

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

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

1,2,4-Trimethylbenzene (CAS 95-63-6)

Naphthalene (CAS 91-20-3)

CERCLA Hazardous Substance List (40 CFR 302.4)

Naphthalene (CAS 91-20-3)

CERCLA Hazardous Substances: Reportable quantity

Naphthalene (CAS 91-20-3) 100 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

Not regulated.

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

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

Food and Drug Not regulated.

Administration (FDA)

Material name: Fuel Therapy® with Anti-Gel 05425, 05455 Version #: 01 Issue date: 03-10-2015

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

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

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

Stoddard Solvent (CAS 8052-41-3) 1,2,4-Trimethylbenzene (CAS 95-63-6) Diesel Fuel No. 2 (CAS 68476-34-6) Naphthalene (CAS 91-20-3)

Solvent naphtha (petroleum), heavy arom. (CAS 64742-94-5)

US. Massachusetts RTK - Substance List

1,2,4-Trimethylbenzene (CAS 95-63-6) Stoddard Solvent (CAS 8052-41-3)

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

Naphthalene (CAS 91-20-3)

1,2,4-Trimethylbenzene (CAS 95-63-6) Diesel Fuel No. 2 (CAS 68476-34-6) Stoddard Solvent (CAS 8052-41-3)

US. Rhode Island RTK

1,2,4-Trimethylbenzene (CAS 95-63-6)

Naphthalene (CAS 91-20-3)

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

Benzene (CAS 71-43-2) Listed: February 27, 1987 Ethylbenzene (CAS 100-41-4) Listed: June 11, 2004 Naphthalene (CAS 91-20-3) Listed: April 19, 2002

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

Benzene (CAS 71-43-2) Listed: December 26, 1997 Toluene (CAS 108-88-3) Listed: January 1, 1991 US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

Toluene (CAS 108-88-3) Listed: August 7, 2009 US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Benzene (CAS 71-43-2) Listed: December 26, 1997

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 97.2 %

51.100(s))

Consumer products Not regulated

(40 CFR 59, Subpt. C)

State

VOC content (CA) 97.2 %
VOC content (OTC) 97.2 %

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

Country(s) or region	Inventory name	On inventory (yes/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

Toxic Substances Control Act (TSCA) Inventory *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

Issue date 03-10-2015 Prepared by Allison Cho

Version #

United States & Puerto Rico

CRC # 637Q **Further information HMIS®** ratings Health: 1* Flammability: 2 Physical hazard: 0

Health: 1 NFPA ratings

Flammability: 2 Instability: 0

Personal protection: B

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.

Yes



Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Date of issue: 06/01/2015 Revision date: 06/01/2015 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Diesel Treat

Product code : 103060, 103061, 103062, 103064, 103065, 103066, 103068, 103070, 103089

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Motor Fuel Additive

1.3. Details of the supplier of the safety data sheet

R.B. Howes & Co., Inc. / Howes Lubricator 60 Ocean State Drive North Kingstown, RI

T 401-294-5500, 1-800 GET HOWES (438-4693)

1.4. Emergency telephone number

Emergency number : CHEMTREC 1 (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable Liquid 4

Skin Irritation 2

Carcinogenicity 2

Specific target organ toxicity - Repeated exposure 1

Aspiration Toxicity 1

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



07 GHS

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : Combustible liquid. Causes skin irritation. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure. May be fatal if swallowed and enters airways.

Precautionary statements (GHS-US) : Keep away from flames and hot surfaces. – No smoking. Wash hands thoroughly after

handling. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. If exposed or concerned: Get medical advice/attention. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3. Other hazards

No additional information available.

2.4. Unknown acute toxicity (GHS-US)

31 percent of the mixture consists of ingredient(s) of unknown acute toxicity.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable.

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Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

3.2. **Mixture**

Name	Product identifier	%	GHS-US classification
Distillates, petroleum, hydrotreated middle	(CAS No) 64742-46-7	40 - 70	Flam. Liq. 4 Acute Tox. 4 (Inhalation) Asp. Tox. 1
Stoddard solvent	(CAS No) 8052-41-3	15 - 40	Skin Irrit. 2 STOT RE 1 Asp. Tox. 1
Petroleum distillates, hydrotreated light	(CAS No) 64742-47-8	10 - 30	Flam. Liq. 3 Asp. Tox. 1
Solvent naphtha, petroleum, light aromatic	(CAS No) 64742-95-6	1 - 5	Flam. Liq. 3 Skin Irrit. 2 Eye Irrit. 2A Asp. Tox. 1
Benzene, 1,2,4-trimethyl-	(CAS No) 95-63-6	1 - 5	Flam. Liq. 3 Acute Tox. 4 (Inhalation) Skin Irrit. 2 Eye Irrit. 2A STOT SE 3
Fatty acid amine reaction product	Trade secret	1 - 5	Skin Irrit. 2 Eye Irrit. 2A
Nonane	(CAS No) 111-84-2	1 - 5	Flam. Liq. 3 Acute Tox. 4 (Inhalation) Skin Irrit. 2 STOT SE 3 Asp. Tox. 1
Naphthalene	(CAS No) 91-20-3	0.1 - 1	Acute Tox. 4 (Oral) Carc. 2
Ethylbenzene	(CAS No) 100-41-4	< 0.1	Flam. Liq. 2 Acute Tox. 4 (Inhalation) Skin Irrit. 2 Eye Irrit. 2B Carc. 2 Asp. Tox. 1
Cumene	(CAS No) 98-82-8	< 0.1	Flam. Liq. 3 Carc. 2 STOT SE 3 Asp. Tox. 1

^{*} The specific chemical identity and exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

SECTION 4: First aid measures

4. I. Describitori di ilisi alu illeasure	4.1.	Descrip	tion of fire	st aid measures
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First-aid measures after inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

First-aid measures after eye contact In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

First-aid measures after ingestion : If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious

person. Get immediate medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory tract irritation. Vapours may cause drowsiness and dizziness.

Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking Symptoms/injuries after skin contact

of the skin.

Symptoms/injuries after eye contact May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear

production, with possible redness and swelling.

Symptoms/injuries after ingestion : May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.

Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

SECTION 5: Firefighting measures

Extinguishing media

: Powder, water fog, foam, carbon dioxide. Suitable extinguishing media

Unsuitable extinguishing media : Do not use water jet.

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Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

5.2. Special hazards arising from the substance or mixture

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

Advice for firefighters 5.3.

: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory Protection during firefighting

protection (SCBA). Use water spray to keep fire-exposed containers cool.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to General measures

unnecessary and unprotected personnel. Eliminate sources of ignition.

Methods and material for containment and cleaning up

: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable For containment

container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal

Protective Equipment (PPE).

Methods for cleaning up Scoop up material and place in a disposal container. Spilled material may present a slipping

hazard. Provide ventilation.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling : Keep away from sources of ignition - No smoking. Avoid contact with skin and eyes. Do not

breathe dust/fume/gas/mist/vapors/ spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.

Hygiene measures : Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions Keep locked up and out of reach of children. Keep container tightly closed and in a well-

ventilated place. Keep cool.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

Control parameters 8.1.

Distillates, petroleum, hydrotreated middle (64742-46-7)	
ACGIH	Not applicable
OSHA	Not applicable

Stoddard solvent (8052-41-3)		
ACGIH	ACGIH TWA (ppm)	100 ppm
OSHA	OSHA PEL (TWA) (mg/m³)	2900 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	500 ppm

Petroleum distillates, hydrotreated light (64742-47-8)	
ACGIH	Not applicable
OSHA	Not applicable

Solvent naphtha, petrole	Solvent naphtha, petroleum, light aromatic (64742-95-6)	
ACGIH	Not applicable	
OSHA	Not applicable	

Benzene, 1,2,4-trimethyl- (95-63-6)	
ACGIH	Not applicable
OSHA	Not applicable

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Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Fatty acid amine reac	tion product		
ACGIH	Not applicable		
OSHA	Not applicable	Not applicable	
Nonane (111-84-2)			
ACGIH	ACGIH TWA (ppm)	200 ppm	
OSHA	Not applicable		
Naphthalene (91-20-3)			
ACGIH	ACGIH TWA (ppm)	10 ppm	
OSHA	OSHA PEL (TWA) (mg/m³)	50 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	10 ppm	
Ethylbenzene (100-41	-4)		
ACGIH	ACGIH TWA (ppm)	20 ppm	
OSHA	OSHA PEL (TWA) (mg/m³)	435 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	100 ppm	
Cumene (98-82-8)			
ACGIH	ACGIH TWA (ppm)	50 ppm	
OSHA	OSHA PEL (TWA) (mg/m³)	245 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	50 ppm	

Exposure controls

Vapour pressure

: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below Appropriate engineering controls

recommended exposure limits.

Hand protection : Wear chemically resistant protective gloves.

Eye protection Safety glasses or goggles are recommended when using product.

Skin and body protection Wear suitable protective clothing.

: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection Respiratory protection

must be based on known or anticipated exposure levels, the hazards of the product and the

safe working limits of the selected respirator.

Environmental exposure controls Maintain levels below Community environmental protection thresholds.

Other information Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully

before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state : Liquid

: No data available Appearance Colour : Light amber Odour Distinctive

Odour threshold No data available : No data available рΗ Melting point No data available Freezing point : No data available Boiling point 164 °C (327 °F) : > 65.5 °C (> 150 °F) Flash point Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : Flammable **Explosive limits** : No data available : No data available Explosive properties : No data available Oxidising properties

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: < 0.1 mm Hg

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

 $: < 0.9 (H_2O = 1)$ Relative density Relative vapour density at 20 °C : > 1 (air = 1)Solubility : Insoluble.

Partition coefficient: n-octanol/water : No data available Log Kow : No data available Auto-ignition temperature : No data available Decomposition temperature : No data available Viscosity : No data available

Viscosity, kinematic : < 20.5 cSt @ 40 °C (104 °F)

Viscosity, dynamic : No data available

Other information 9.2.

VOC content : 823 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reaction known under conditions of normal use.

Chemical stability

Stable under normal storage conditions.

Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

10.4. **Conditions to avoid**

Heat. Incompatible materials. Sources of ignition.

Incompatible materials

Strong oxidizers.

Diesel Treat

Hazardous decomposition products 10.6.

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified.

LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat	Not available.
Distillates, petroleum, hydrotreated middle (64742-46-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	4.6 mg/l/4h
Petroleum distillates, hydrotreated light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 5.2 mg/l/4h

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Solvent naphtha, petroleum, light aromatic (64	4742-95-6)
LD50 oral rat	8400 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	3400 ppm/4h

Benzene, 1,2,4-trimethyl- (95-63-6)		
LD50 oral rat	3280 mg/kg	
LD50 dermal rabbit	> 3160 mg/kg	
LC50 inhalation rat	18 g/m³/4h	
Fatty acid amine reaction product		

LD50 oral rat	> 3000 mg/kg	
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Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Fatty acid amine reaction product		
LD50 dermal rabbit	> 2000 mg/kg	
Nonane (111-84-2)		
LC50 inhalation rat	3200 ppm/4h	
Naphthalene (91-20-3)		
LD50 oral rat	490 mg/kg	
LD50 dermal rabbit	>20 g/kg	
Ethylbenzene (100-41-4)		
LD50 oral rat	3500 mg/kg	
LD50 dermal rabbit	15400 mg/kg	
LC50 inhalation rat	17.2 mg/l/4h	
Cumene (98-82-8)		
LD50 dermal rabbit	12300 µl/kg	
LC50 inhalation rat	> 3577 ppm/6h	
Skin corrosion/irritation	: Causes skin irritation.	
Serious eye damage/irritation	: Based on available data, the classification criteria are not met.	
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met.	
Germ cell mutagenicity	: Based on available data, the classification criteria are not met.	
Carcinogenicity	: Suspected of causing cancer.	
Naphthalene (91-20-3)		
IARC group	2B - Possibly carcinogenic to humans	
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen	
Ethylbenzene (100-41-4)		
IARC group	2B - Possibly carcinogenic to humans	
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity	
Cumene (98-82-8)		
IARC group	2B - Possibly carcinogenic to humans	
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity, 3 - Reasonably anticipated to be Human Carcinogen	
Reproductive toxicity	: Based on available data, the classification criteria are not met.	
Specific target organ toxicity (single exposure)	: Based on available data, the classification criteria are not met.	
Specific target organ toxicity (repeated exposure)	: Causes damage to organs through prolonged or repeated exposure.	
Aspiration hazard	: May be fatal if swallowed and enters airways.	
Symptoms/injuries after inhalation	: May cause respiratory tract irritation. Vapours may cause drowsiness and dizziness.	
Symptoms/injuries after skin contact	 Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. 	
Symptoms/injuries after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.	
Symptoms/injuries after ingestion	: May be fatal if swallowed and enters airways. This product may be aspirated into the lungs and cause chemical pneumonitis. May cause stomach distress, nausea or vomiting.	

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

Diesel Treat	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Diesel Treat	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

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Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : This material must be disposed of in accordance with all local, state, provincial, and federal

regulations. The generation of waste should be avoided or minimized wherever possible.

Additional information : Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

DOT NA no. NA1993

14.2. UN proper shipping name

DOT Proper Shipping Name : Combustible liquid, n.o.s. (Petroleum distillates)

Department of Transportation (DOT) Hazard Classes : Combustible liquid

Packing group (DOT) : III

14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Benzene, 1,2,4-trimethyl- (95-63-6)	
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %
Nonane (111-84-2)	
FPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

Naphthalene (91-20-3)	
Listed on United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	0.1 %

Ethylbenzene (100-41-4)	
Listed on United States SARA Section 313	
SARA Section 313 - Emission Reporting	0.1 %

Cumene (98-82-8)	
Listed on United States SARA Section 313	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 %

15.2. US State regulations

Diesel Treat	
State or local regulations	This product contains chemicals known to the State of California to cause cancer.

SECTION 16: Other information

Date of issue : 06/01/2015
Other information : None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. 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. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.





SAFETY DATA SHEET

Revision Date 18-Jan-2016 Version 2

1. IDENTIFICATION

Product identifier

Product Name Gumout All-In-One Complete Fuel System Cleaner

Other means of identification

Product Code 10712

Document SKU: 510016, 800001366, 510104

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Fuel System Cleaner -, Consumer Use

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address Manufacturer Address Distributor

ITW Global Brands 6925 Portwest Dr., Suite 100

Houston, TX 77024

Company Phone Number 1-855-888-1988

24 Hour Emergency Phone Number (CHEMTREC) 1-800-424-9300 or 1-703-527-3887 (U.S.)

(RMPDC) 1-877-504-9352 (U.S.)

E-mail address SDS@itwgb.com

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

NOTE: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

Carcinogenicity	Category 1B
Aspiration toxicity	Category 1

Label elements

Emergency Overview

Danger

May cause cancer May be fatal if swallowed and enters airways Combustible Liquid



Revision Date 18-Jan-2016

Appearance Yellow Physical state Liquid Odor Hydrocarbon

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

Avoid breathing mists or vapors

Wash hands and exposed skin after handling

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention IF INHALED: Remove victim to fresh air and keep at rest

IF IN EYES: Rinse thoroughly with water for several minutes. If eye irritation persists, get medical attention

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

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

Keep out of reach of children

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

- May be harmful in contact with skin
- Toxic to aquatic life with long lasting effects
- Harmful to aquatic life
- May cause drowsiness or dizziness

3. COMPOSITION/INFORMATION ON INGREDIENTS

substance(s)

Chemical Name	CAS No	Weight-%	Trade Secret
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT	64742-47-8	30 - 60	*
POLYETHER AMINE	MIXTURE	10 - 30	*
DISTILLATES (PETROLEUM), HYDROTREATED MIDDLE	64742-46-7	10 - 30	*
NAPHTHALENE	91-20-3	0.1 - 1	*

^{*}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.

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Wash contaminated clothing before reuse.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing. If symptoms persist, call a physician.

Ingestion IF SWALLOWED:. Do NOT induce vomiting. Never give anything by mouth to an

unconscious person. Call a physician.

Self-protection of the first aiderUse 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

Dry chemical, CO2, water spray or regular foam

Unsuitable extinguishing media

None.

Specific hazards arising from the chemical

Combustible material.

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 and

inhalation of vapors. Use personal protective equipment as required. Remove all sources of

ignition.

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

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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 cool, well-ventilated place. Keep out of the reach of

children.

Incompatible materials Strong oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
NAPHTHALENE	TWA: 10 ppm	TWA: 10 ppm	IDLH: 250 ppm
91-20-3	S*	TWA: 50 mg/m ³	TWA: 10 ppm
		(vacated) TWA: 10 ppm	TWA: 50 mg/m ³
		(vacated) TWA: 50 mg/m ³	STEL: 15 ppm
		(vacated) STEL: 15 ppm	STEL: 75 mg/m ³
		(vacated) STEL: 75 mg/m ³	_

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 natural rubber, nitrile rubber, Neoprene™ or PVC gloves.

Respiratory protectionUse 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
Appearance Yellow
Odor Hydrocarbon

Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH Not applicable

Melting point / freezing pointNo information availableBoiling point / boiling rangeNot ApplicableFlash point83.4 °C / 182 °F

10712 - Gumout All-In-One Complete Fuel System Cleaner

Evaporation rate No information available Flammability (solid, gas) No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available

Relative density 0.88
Water solubility Negligible

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 (%) <1

Density 0.88 g/cm3

Bulk density No information available

10. STABILITY AND REACTIVITY

Reactivity

Stable under normal use

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

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation May cause irritation of respiratory tract. May cause central nervous system depression with

nausea, headache, dizziness, vomiting, and incoordination. Intentional misuse by

deliberately concentrating and inhaling contents may be harmful or fatal.

Eye contact Contact with eyes may cause irritation. May cause redness and tearing of the eyes.

Skin contact May cause skin irritation and/or dermatitis.

Ingestion Ingestion may cause irritation to mucous membranes. Aspiration may cause pulmonary

edema and pneumonitis. May be fatal if swallowed.

10712 - Gumout All-In-One Complete Fuel System Cleaner

Chemical 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
DISTILLATES (PETROLEUM), HYDROTREATED MIDDLE 64742-46-7	= 7400 mg/kg (Rat)	> 2000 mg/kg(Rabbit)	= 4.6 mg/L (Rat) 4 h
NAPHTHALENE	= 1110 mg/kg (Rat) = 490 mg/kg (= 1120 mg/kg (Rabbit) > 20 g/kg (> 340 mg/m³ (Rat) 1 h
91-20-3	Rat)	Rabbit)	

Information on toxicological effects

Symptoms No information available.

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

SensitizationNo information available.Germ cell mutagenicityNo information available.

CarcinogenicityThe table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
NAPHTHALENE	A3	Group 2A	Reasonably Anticipated	X
91-20-3		•		

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

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

 ATEmix (oral)
 5421 mg/kg

 ATEmix (dermal)
 2007 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
DISTILLATES (PETROLEUM),	-	45: 96 h Pimephales promelas mg/L	
HYDROTREATED LIGHT		LC50 flow-through 2.2: 96 h	heteropoda mg/L LC50
64742-47-8		Lepomis macrochirus mg/L LC50	
		static 2.4: 96 h Oncorhynchus	
		mykiss mg/L LC50 static	
DISTILLATES (PETROLEUM),	-	35: 96 h Pimephales promelas mg/L	-
HYDROTREATED MIDDLE		LC50 flow-through 10000: 96 h	
64742-46-7		Pimephales promelas mg/L LC50	
		static	
NAPHTHALENE	0.4: 72 h Skeletonema costatum	5.74 - 6.44: 96 h Pimephales	2.16: 48 h Daphnia magna mg/L
91-20-3	mg/L EC50	promelas mg/L LC50 flow-through	LC50 1.09 - 3.4: 48 h Daphnia
		1.6: 96 h Oncorhynchus mykiss	magna mg/L EC50 Static 1.96: 48 h
		mg/L LC50 flow-through 0.91 - 2.82:	Daphnia magna mg/L EC50 Flow
		96 h Oncorhynchus mykiss mg/L	through
		LC50 static 1.99: 96 h Pimephales	
		promelas mg/L LC50 static 31.0265:	
		96 h Lepomis macrochirus mg/L	
		LC50 static	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

10712 - Gumout All-In-One Complete Fuel System Cleaner

Mobility

Disperses in water.

Chemical Name	Partition coefficient		
NAPHTHALENE	3.3		
91-20-3			

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastesDisposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number U165

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
NAPHTHALENE	U165	Included in waste streams:	=	U165
91-20-3		F024, F025, F034, F039,		
		K001, K035, K060, K087,		
		K145		

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
NAPHTHALENE	-	-	Toxic waste	-
91-20-3			waste number F025	
			Waste description:	
			Condensed light ends, spent	
			filters and filter aids, and	
			spent desiccant wastes from	
			the production of certain	
			chlorinated aliphatic	
			hydrocarbons, by free	
			radical catalyzed processes.	
			These chlorinated aliphatic	
			hydrocarbons are those	
			having carbon chain lengths	
			ranging from one to and	
			including five, with varying	
			amounts and positions of	
			chlorine substitution.	

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		
NAPHTHALENE	Toxic		
91-20-3			

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** Not determined **ENCS** Not Listed. Not determined **IECSC** Not determined KECL Not determined **PICCS AICS** Not determined

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 %
NAPHTHALENE - 91-20-3	0.1
SARA 311/312 Hazard Categories	
Acute health hazard	No
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)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances	
NAPHTHALENE 91-20-3	100 lb	X	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	CERCLA/SARA RQ	Reportable Quantity (RQ)
NAPHTHALENE	1 lb	-	RQ 1 lb final RQ
91-20-3			RQ 0.454 kg final RQ

US State Regulations

California Proposition 65

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Chemical Name	California Proposition 65
NAPHTHALENE - 91-20-3	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
NAPHTHALENE	X	X	X
91-20-3			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

WHMIS Hazard Class

D2A - Very toxic materials

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 2 Flammability 2 Instability 0

HMIS Health hazards 2 Flammability 2 Physical hazards 0 Personal protection B

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

Revision Date 18-Jan-2016

Revision Note 3

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

SAFETY DATA SHEET

OSHA HCS (29 CFR 1910.1200)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Chemical Name Mixture CAS No. Mixture

Trade Name SPRAY PRODUCTS STARTING FLUID Product Code SP-065516A, SP-065512AF, SP-065512A

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

Identified Use(s) Engine starting aid

Uses Advised Against None

Company Identification Spray Products Corporation

P.O. Box 737

Norristown, PA 19404

Telephone (610) 277-1010 Fax (610) 277-4390

E-Mail (competent person) johnd@sprayproducts.com

Emergency telephone number

Emergency Phone No. Transportation Emergency: CHEMTREC 24 hr. 1-800-424-

9300 / 1 (703) 527-3887 (Collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

OSHA HCS (29 CFR 1910.1200)

Label elements

Hazard Symbol

Flam. Aerosol 1; Compressed dissolved gas; Carc. 2; Skin Irrit. 2; STOT SE 3; Asp. Tox. 1 $\,$



Signal word(s)

Hazard Statement(s) Extremely flammable aerosol.

Contains gas under pressure; may explode if heated.

May cause cancer.

Causes skin irritation. Repeated exposure may cause skin dryness or

cracking.

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Precautionary Statement(s) Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

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

Do not pierce or burn, even after use.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/eye protection.

Avoid breathing spray.

Protect from sunlight and do not expose to temperatures exceeding 50

°C/122 °F.

Wash hands and exposed skin after use.

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Other hazards

Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	% wt. *	CAS No.	Hazard classification
			Flam. Liq. 2, H225
			Asp. Tox. 1; H304 Skin Irrit. 2, H315
Heptane, branched, cyclic and linear	35 - 70	426260-76-6	STOT SE 3, H336
			Aquatic Acute 2, H401
			Aquatic Chronic 3, H412
			Flam. Liq. 1; H224
Diethyl Ether	25 - 60	60-29-7	Acute Tox. 4; H302
			STOT SE 3; H336
Carbon Dioxide	5 - 10	124-38-9	Compressed dissolved gas; H280
Ethanol	< 2	64-17-5	Flam. Liq. 2; H225
Litation			Eye Irrit. 2; H319
			Flam. Gas 1; H220
Chloroethane	< 1	75-00-3	Carc. 2; H351
			Aquatic Chronic 3; H412
Distillates (petroleum), hydrotreated heavy naphthenic	<0.5	64742-52-5	Asp. Tox. 1; H304
Distillates (petroleum), hydrotreated Light naphthenic	<0.5	64742-53-6	Asp. Tox. 1; H304

Additional Information - None

SECTION 4: FIRST AID MEASURES



Description of first aid measures

Inhalation Move person to fresh air. If breathing is labored, administer oxygen. If

symptoms develop, obtain medical attention.

Skin Contact Wash affected skin with soap and water. If irritation (redness, rash,

blistering) develops, get medical attention.

Eye Contact 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.

Ingestion Do not induce vomiting. Do not give anything by mouth to an

unconscious person. Get immediate medical attention.

Most important symptoms and effects, both acute and

delayed

May be fatal if swallowed and enters airways. Do NOT induce vomiting.

Indication of any immediate medical attention and

special treatment needed

IF SWALLOWED: Immediately call a POISON CENTER or

doctor/physician.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

-Suitable Extinguishing Media

-Unsuitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or water spray. Do not use water jet.

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^{*} The exact percentage withheld as a trade secret in accordance with 29 CFR 1910.1200.

Special hazards arising from the substance or

mixture

Highly flammable vapor (flash point below 23°C).

Advice for fire-fighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and

emergency procedures

Avoid contact with skin and eyes.

Environmental precautions

Prevent liquid entering sewers, basements and work pits.

Methods and material for containment and cleaning up

Cover spills with inert absorbent material. Transfer to a container for

disposal or recovery.

Reference to other sections None
Additional Information None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking. Avoid contact with skin and eyes. Use product in a well-ventilated area only. Do not use in confined spaces.

Conditions for safe storage, including any incompatibilities

-Storage temperature Store in a well-ventilated place. Protect from sunlight. Do not expose

to temperatures exceeding 50°C/122°F. Keep container tightly

closed.

-Incompatible materials This product should be stored away from sources of strong heat or

oxidizing chemicals.

Specific end use(s) Engine starting aid

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

		(8hr TWA)		(S	ΓEL)	
SUBSTANCE.	CAS No.	PEL (OSHA)	TLV (ACGIH)	PEL (OSHA)	TLV (ACGIH)	Note:
Heptane, branched, cylic and linear	426260-76-6	500 ppm*	1500 mg/m ³			*n-heptane
Diethyl ether	60-29-7	400 ppm	400 ppm		500 ppm	
Chloroethane	75-00-3	1000 ppm	100 ppm*			*A3
Carbon dioxide	124-38-9		5000 ppm		30,000 ppm	

#Assure minimum oxygen content of work atmosphere. *A3 = Confirmed Animal Carcinogen with Unknown Relevance to Humans

Recommended monitoring method

NIOSH 1500 (hydrocarbons, B.P. 36 - 126 °C); NIOSH 1610 (Ethyl

ether); NIOSH 2519 (Ethyl chloride)

Exposure controls

Appropriate engineering controls

Provide adequate ventilation to ensure that the occupational exposure

limit is not exceeded.

Personal protection equipment

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Eye/face protection

Wear protective eyewear (goggles, face shield, or safety glasses).



Skin protection (Hand protection/ Other)



Wear suitable gloves if prolonged skin contact is likely (Nitrile rubber or Butyl rubber). Check with protective equipment manufacturer's data.



Respiratory protection Normally no personal respiratory protection is necessary. In case of

insufficient ventilation, wear suitable respiratory equipment. Check with

protective equipment manufacturer's data.

Thermal hazards

Not normally required. Use gloves with insulation for thermal

protection, when needed.

Environmental Exposure Controls

Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Liquid Color. Colorless

Odor Sweetish. Hydrocarbon-like

Odor Threshold (ppm) Not available Not available pH (Value)

Melting Point (°C) / Freezing Point (°C) Not available Boiling point/boiling range (°C): 34 - 35 (Diethylether) Flash Point (°C) -45 (Diethylether) **Evaporation Rate** Not available

Flammability (solid, gas) Extremely flammable **Explosive Limit Ranges**

1.85% - 36.5% v/v (Diethylether) Vapor pressure (Pascal) 7.16 x 104 (Diethylether)

Not available Vapor Density (Air=1) Density (g/ml) Not available Solubility (Water) Not available Not available Solubility (Other) Partition Coefficient (n-Octanol/water) Not available

Auto Ignition Point (°C) 175 (Diethylether) Decomposition Temperature (°C) Not available Kinematic Viscosity (cSt) <20 @ 40 °C Explosive properties Not available Not available Oxidizing properties

Other information Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity Stable under normal conditions.

Chemical stability Stable.

Possibility of hazardous reactions None anticipated.

Conditions to avoid Avoid contact with heat and ignition sources.

Incompatible materials This product should be stored away from sources of strong heat or

oxidizing chemicals.

Hazardous decomposition product(s) Carbon monoxide, Carbon dioxide, Acrid smoke

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SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes: Inhalation, Skin Contact, Eye Contact

Information on toxicological effects

Heptane, branched, cylic and linear (CAS# 426260-76-6) - By analogy with similar materials:

Acute toxicity Oral: LD50 >5 g/kg-bw

Dermal: LD50 >2 g/kg-bw

Inhalation: LC50 = 65 - 103 mg/L (Vapour), 4-hr. rat

May cause drowsiness or dizziness.

May be fatal if swallowed and enters airways.

Irritation/Corrosivity Causes skin irritation. Repeated exposure may cause skin

dryness or cracking. May cause eye irritation.

Sensitisation It is not a skin sensitiser.

Repeated dose toxicity NOAEC: 12350 mg/m3 (2 yr, inhal., rat, Systemic effects)

LOAEC: 1650 mg/m3 (2 hr, inhal., rat, CNS effects)

May cause drowsiness or dizziness.

Carcinogenicity No data. It is unlikely to present a carcinogenic hazard to

man.

NTP	IARC	IARC ACGIH		NIOSH
No.	No.	No.	No.	No.

Mutagenicity There is no evidence of mutagenic potential.

Toxicity for reproduction No information available

Chloroethane (CAS# 75-00-3)

NTP	IARC	ACGIH	OSHA	NIOSH
Clear Evidence in Female Mice	No.	A3 - Confirmed Animal Carcinogent	No.	Yes.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Heptane, branched, cylic and linear (CAS# 426260-76-6) - By analogy with similar materials:

Short term LL50 (96 hour): >13.4 mg/L (Oncorhynchus mykiss)

EL50 (48 hour): 3 mg/l (Daphnia magna, mobility)

EC50 (96 hour): 13 mg/l (Pseudokirchnerella subcapitata)

Long Term NOELR (28 days) 1.5 mg/l (Fish) QSAR

LOEC (21 days): 0.32 mg/l (Daphnia magna)

NOEL (96 hour) 6.3 mg/l (Algae)

Persistence and degradability Readily biodegradable.

The product has no potential for bioaccumulation. Bioaccumulative potential

Mobility in soil Not available.

Results of PBT and vPvB assessment Not classified as PBT or vPvB.

Other adverse effects None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Disposal should be in accordance with local, state or national

legislation. Consult an accredited waste disposal contractor or the

local authority for advice.

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SECTION 14: TRANSPORT INFORMATION

Sea transport Air transport U.S. DOT (IMDG) (ICAO/IATA) **UN** number 1950 1950 1950 **Proper Shipping Name** Aerosols, flammable Aerosols, flammable Aerosols, flammable Transport hazard class(es) 2.1 2.1 2.1 Packing group Not applicable Not applicable Not applicable **Environmental hazards** None assigned None assigned None assigned Special precautions for user None assigned None assigned None assigned

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

Chemical Name	CAS No.	Typical %wt.	RQ (Pounds)
Chloroethane	75-00-3	< 1	1000

SARA 311/312 - Hazard Categories:

oxine Fire oxine Sudden Release oxine Reactivity oxine Immediate (acute) oxine Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

Chemical Name	CAS No.	Typical %wt.
Chloroethane	75-00-3	< 1

SARA 302 - Extremely Hazardous Substances (40 CFR 355):

Chemical Name	CAS No.	Typical %wt.	TPQ (pounds)
None			

California Proposition 65 List:

Chemical Name	CAS No.	Type of Toxicity
Toluene	108-88-3	Developmental
Chloroethane	45-00-3	Cancer

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: April 20, 2015

Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:

Hazard Statement(s)

- H220: Extremely flammable gas.
- H224: Extremely flammable liquid and vapour.
- H225: Highly flammable liquid and vapor.
- H280: Contains gas under pressure; may explode if heated.
- H302: Harmful if swallowed.
- H304: May be fatal if swallowed and enters airways.
- H315: Causes skin irritation.
- -H319: Causes serious eye irritation.
- H336: May cause drowsiness or dizziness.
- H351: Suspected of causing cancer.
- H401: Toxic to aquatic life.
- H412: Harmful to aquatic life with long lasting effects.

Revision: June 3, 2015 Page: 6/7

Training advice: None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. 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. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Revision: June 3, 2015 Page: 7/7

FRSC Chemical Solutions

SAFETY DATA SHEET

1. Identification

Product identifier Motor Medic Thrust Starting Fluid

Other means of identification

SDS number M3815 Part No. M3815

Tariff code 2909.11.0000

Recommended use Starting Fluid

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name
Address
RSC Chemical Solutions
600 Radiator Road
Indian Trail, NC 28079

United States

Telephone Customer Service: (704) 821-7643

Technical: (704) 684-1811

Website www.rscbrands.com

E-mail Not available.

Emergency phone number Emergency Telephone: (303) 623-5716

Emergency Contact: RMPDC (877-740-5015)

2. Hazard(s) identification

Physical hazardsFlammable aerosolsCategory 1Health hazardsAcute toxicity, oralCategory 4Skin corrosion/irritationCategory 2Serious eye damage/eye irritationCategory 2B

Specific target organ toxicity, single exposure Category 3 narcotic effects

Environmental hazards Hazardous to the aquatic environment, acute Category 1

Carcinogenicity

hazard

Hazardous to the aquatic environment.

long-term hazard

Not classified.

OSHA defined hazards

Label elements



Signal word Danger

Hazard statement Extremely flammable aerosol. Harmful if swallowed. Causes skin irritation. Causes eye irritation.

May cause drowsiness or dizziness. May cause cancer. Very toxic to aquatic life. Very toxic to

Category 1B

Category 1

aquatic life with long lasting effects.

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. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Material name: Motor Medic Thrust Starting Fluid
M3815 Version #: 02 Revision date: 05-18-2015 Issue date: 05-07-2015

Response If swallowed: Call a poison center/doctor if you feel unwell. If on skin: Wash with plenty of water. If

inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison

center/doctor if you feel unwell. Rinse mouth. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Collect spillage.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from

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

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information 81.4% of the mixture consists of component(s) of unknown acute oral toxicity. 25.6% of the

mixture consists of component(s) of unknown acute hazards to the aquatic environment. 25.6% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Heptane		142-82-5	70 - < 80
ETHANE, 1,1'-OXYBIS-		60-29-7	10 - < 20
Carbon Dioxide		124-38-9	5 - < 10
Hydrotreated Heavy Naphthenic Distillate (petroleum)		64742-52-5	1 - < 3

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON

CENTER or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get

medical advice/attention. Wash contaminated clothing before reuse.

Eye contact 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.

Ingestion Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Get medical advice/attention if you feel unwell.

Most important symptoms/effects, acute and delayed

May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information IF exposed or concerr of the material(s) invol

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.

5. Fire-fighting measures

Suitable extinguishing media Powder. Alcohol resistant foam. Carbon dioxide (CO2).

Unsuitable extinguishing Do not use w media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire fighting equipment/instructions

Specific methods

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not

breathe fumes.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. 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

Refer to attached safety data sheets and/or instructions for use. Keep combustibles (wood, paper, oil, etc.) away from spilled material. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. 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. For waste disposal, see section 13 of the SDS.

Environmental precautions

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

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Keep out of the reach of children. 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	Туре	Value	Form	
Carbon Dioxide (CAS 124-38-9)	PEL	9000 mg/m3		
		5000 ppm		
ETHANE, 1,1'-OXYBIS- (CAS 60-29-7)	PEL	1200 mg/m3		
		400 ppm		
Heptane (CAS 142-82-5)	PEL	2000 mg/m3		
		500 ppm		
Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)	PEL	5 mg/m3	Mist.	
,		2000 mg/m3		
		500 ppm		
US. ACGIH Threshold Limit Value	s			
Components	Туре	Value	Form	
Carbon Dioxide (CAS 124-38-9)	STEL	30000 ppm		

Material name: Motor Medic Thrust Starting Fluid

SDS US

Components	Туре	Value	Form
	TWA	5000 ppm	
ETHANE, 1,1'-OXYBIS- (CAS 60-29-7)	STEL	500 ppm	
	TWA	400 ppm	
Heptane (CAS 142-82-5)	STEL	500 ppm	
	TWA	400 ppm	
Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)	TWA	5 mg/m3	Inhalable fraction.
US. NIOSH: Pocket Guide to	Chemical Hazards		
Components	Туре	Value	Form
Carbon Dioxide (CAS 124-38-9)	STEL	54000 mg/m3	
,		30000 ppm	
	TWA	9000 mg/m3	
		5000 ppm	
Heptane (CAS 142-82-5)	Ceiling	1800 mg/m3	
		440 ppm	
	TWA	350 mg/m3	
		85 ppm	
Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)	Ceiling	1800 mg/m3	
,	STEL	10 mg/m3	Mist.
ogical limit values	No biological exposure limits noted for	the ingredient(s).	
ropriate engineering trols	Good general ventilation (typically 10 a should be matched to conditions. If ap or other engineering controls to mainta exposure limits have not been establis wash facilities and emergency shower	plicable, use process enclosu ain airborne levels below reco shed, maintain airborne levels	res, local exhaust ventilatio mmended exposure limits. I to an acceptable level. Eye

Bio

App

con

Chemical respirator with organic vapor cartridge and full facepiece. Eye/face protection

Skin protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove **Hand protection**

supplier.

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

Respiratory protection Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Keep away from food and drink. 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

Liquid. Clear. **Appearance**

Physical state Liquid. **Form** Aerosol. Colorless Color Ester-like. Odor **Odor threshold** Not available. Not available.

Melting point/freezing point -189.94 °F (-123.3 °C) estimated Initial boiling point and boiling -109.3 °F (-78.5 °C) estimated

range

Material name: Motor Medic Thrust Starting Fluid

Flash point -1.0 °F (-18.3 °C) Tag Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

(%

1.9 % estimated

Flammability limit - upper

(%)

36.5 % estimated

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 4083.55 hPa estimated

Vapor densityNot available.Relative densityNot available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 320 °F (160 °C) estimated

Decomposition temperature Not available. **Viscosity** Not available.

Other information

Density 5.75 lbs/gal **Explosive properties** Not explosive.

Flammability class Flammable IA estimated
Heat of combustion (NFPA 30.82 kJ/g estimated

30B)

Oxidizing properties Not oxidizing.

Percent volatile 18.6 % estimated

Specific gravity 0.69 VOC (Weight %) 93 %

10. Stability and reactivity

ReactivityThe 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 Hazardous polymerization does not occur.

reactions

Conditions to avoidAvoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents. Aluminum.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be

harmful.

Skin contactCauses skin irritation.Eye contactCauses eye irritation.IngestionHarmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Headache. May cause drowsiness and dizziness. Nausea, vomiting. Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause

redness and pain.

Information on toxicological effects

Acute toxicity Harmful if swallowed. Narcotic effects.

Components Species Test Results

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7)

Acute Inhalation

LC50 Rat 32000 ppm, 4 Hours

Oral

LD50 Rat 3230 - 3920 mg/kg

Heptane (CAS 142-82-5)

<u>Acute</u>

Inhalation

 LC50
 Rat
 103 mg/l, 4 Hours

 LD50
 Mouse
 75 mg/l, 2 Hours

Skin corrosion/irritation Causes skin irritation.
Serious eye damage/eye Causes eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Hydrotreated Heavy Naphthenic Distillate (petroleum) Known To Be Human Carcinogen.

(CAS 64742-52-5)

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components Species Test Results

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7)

Aquatic

Fish LC50 Fathead minnow (Pimephales promelas) 2560 mg/l, 96 hours

Heptane (CAS 142-82-5)

Aquatic

Fish LC50 Mozambique tilapia (Tilapia 375 mg/l, 96 hours

mossambica)

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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

ETHANE, 1,1'-OXYBIS- 0.89

^{*} Estimates for product may be based on additional component data not shown.

^{*} Estimates for product may be based on additional component data not shown.

Partition coefficient n-octanol / water (log Kow)

4.66 Heptane

Mobility in soil No data available.

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents

> under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international

regulations.

Dispose in accordance with all applicable regulations. Local disposal regulations

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

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).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal. Do not re-use empty containers.

14. Transport information

DOT

UN number Not available.

UN proper shipping name

Consumer Commodity

Transport hazard class(es)

Class ORM-D

Subsidiary risk Label(s) 2.1

Not applicable. **Packing group**

Environmental hazards

Marine pollutant Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions T75, TP5 Packaging exceptions 306 Packaging non bulk 304 Packaging bulk 314, 315

IATA

UN number UN1950

UN proper shipping name Aerosols, Flammable (Starting Fluid)

Transport hazard class(es)

2.1 Class Subsidiary risk Ш Packing group **Environmental hazards** Yes **ERG Code**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo Allowed.

aircraft

Cargo aircraft only Allowed.

IMDG

UN1950 **UN** number

UN proper shipping name Aerosols (ILimited QtY)

Transport hazard class(es)

2.1 Class Subsidiary risk

Packing group Not applicable.

Environmental hazards

Marine pollutant Yes **EmS** F-D, S-U

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to

Not established. Annex II of MARPOL 73/78 and

the IBC Code



Marine pollutant



General information IMDG Regulated Marine Pollutant. DOT Regulated Marine Pollutant.

15. Regulatory information

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)

CERCLA Hazardous Substance List (40 CFR 302.4)

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7) Listed. Heptane (CAS 142-82-5) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Nο

chemical

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)

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7)

Safe Drinking Water Act Not regulated.

(SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7) 6584

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7) 35 %WV

DEA Exempt Chemical Mixtures Code Number

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7) 6584

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)

US. Massachusetts RTK - Substance List

Carbon Dioxide (CAS 124-38-9)

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7)

Heptane (CAS 142-82-5)

Hydrotreated Heavy Naphthenic Distillate (petroleum) (CAS 64742-52-5)

Inventory name

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

Carbon Dioxide (CAS 124-38-9)

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7)

Heptane (CAS 142-82-5)

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

Carbon Dioxide (CAS 124-38-9)

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7)

Heptane (CAS 142-82-5)

US. Rhode Island RTK

ETHANE, 1,1'-OXYBIS- (CAS 60-29-7)

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(e) or region

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
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)

Material name: Motor Medic Thrust Starting Fluid

SDS US

On inventory (vec/ne)*

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

 Issue date
 05-07-2015

 Revision date
 05-18-2015

Version # 02

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.

Revision Information Physical & Chemical Properties: Multiple Properties

Transport Information: Material Transportation Information

Material name: Motor Medic Thrust Starting Fluid

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Safety Data Sheet



Section 1: Identification

Product identifier

Product Name • NAPA Diesel Fuel Conditioner with Antigel

Synonyms • 590159

Product Code • 9600; 9601; 9612

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

Recommended use • Read label for use directions and claims

Restrictions on use • For use only in diesel fuel

Details of the supplier of the safety data sheet

Manufacturer
 Gold Eagle Co.

4400 S. Kildare Avenue Chicago, IL 60632-4372

United States

http://www.goldeagle.com/

Telephone (General) • 773-376-4400

Emergency telephone number

• 1-800-535-5053 - (INFOTRAC #22283)

Section 2: Hazard Identification

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

OSHA HCS 2012 • Flammable Liquids 4

Aspiration 1

Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects

Carcinogenicity 2
Reproductive Toxicity 1B

Label elements
OSHA HCS 2012

DANGER





Hazard statements · Combustible liquid

May be fatal if swallowed and enters airways

May cause drowsiness or dizziness Suspected of causing cancer.

May damage fertility or the unborn child.

Precautionary statements

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 and/or hot surfaces. - No smoking.

Avoid breathing mists, vapours, and/or spray. Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

In case of fire: Use appropriate media for extinction.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

breathing

Call a POISON CENTER or doctor/physician if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Do NOT induce vomiting.

IF exposed or concerned: Get medical advice/attention.

Storage/Disposal • Store in a well-ventilated place. Keep container tightly closed.

> Keep cool. Store locked up.

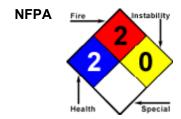
Dispose of content and/or container in accordance with local, regional, national, and/or

international regulations.

Other hazards

OSHA HCS 2012 Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Other information



Section 3 - Composition/Information on Ingredients

Substances

· Material does not meet the criteria of a substance.

Mixtures

Composition						
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive		
Distillates (petroleum), hydrotreated light	CAS :64742-47-8	0% TO 50%	NDA	OSHA HCS 2012: Flam. Liq. 4; Asp. Tox. 1; STOT SE 3: Narc.		
2-Ethylhexyl nitrate	CAS :27247- 0% TO 96-7 24% NDA		NDA	OSHA HCS 2012: Flam. Liq. 4		
Proprietary	Proprietary	<= 10%	NDA	OSHA HCS 2012: Flam. Liq. 4; Eye Irrit. 2; STOT SE 3: Narc.		
Solvent naphtha	CAS :64742- 94-5	0% TO 6%	NDA	OSHA HCS 2012: Not Classified		
1,2,4-Trimethylbenzene	CAS:95-63-6	0% TO 4%	NDA	OSHA HCS 2012: Flam. Liq. 3; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3: Narc; STOT SE 3: Resp. Irrit. (inhl); Asp. Tox. 1		
Solvent naphtha (petroleum), light aromatic	CAS :64742- 95-6	0% TO 3.7%	NDA	OSHA HCS 2012: Eye Irrit. 2; Asp. Tox. 1		

Preparation Date: 16/October/2015

Format: GHS Language: English (US) OSHA HCS 2012 Revision Date: 16/October/2015 Page 2 of 15

1,3,5-Trimethylbenzene	CAS :108-67-	0% TO 0.6%	NDA	OSHA HCS 2012: Flam. Liq. 3; Eye Irrit. 2; Skin Irrit. 2; STOT SE 3: Resp. Irrit.; STOT SE 3: Narc.; Asp. Tox. 1
1,2,3-Trimethylbenzene	CAS :526-73-	0% TO 0.6%	NDA	OSHA HCS 2012: Flam. Liq. 3; STOT SE 3: Narc.
Xylene	CAS :1330- 20-7	0% TO 0.5%	NDA	OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (inhl); Skin Irrit. 2; Eye Irrit. 2; Repr. 1B (Inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit.
Naphthalene	CAS :91-20-3	0% TO 0.499%	NDA	OSHA HCS 2012: Flam. Sol. 2; Acute Tox. 4 (orl); Skin Irrit. 2; Muta. 2; Carc. 2; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (Blood, Eyes; Orl, Inhl)
1-Methylethylbenzene	CAS:98-82-8	0% TO 0.12%	NDA	OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (orl); Skin Irrit. 2; Eye Irrit. 2; Carc. 2 (inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit. (inhl); Asp. Tox. 1

Section 4: First-Aid Measures

Description of first aid measures

Inhalation

 Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.

Skin

 In case of burns, immediately cool affected skin for as long as possible with cold water. Do not remove clothing if adhering to skin. Remove and isolate contaminated clothing. Wash skin with soap and water.

Eye

 Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Get medical attention immediately.

Ingestion

• Do NOT induce vomiting. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed

• Refer to Section 11 - Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

 All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable Extinguishing Media • Use carbon dioxide, dry chemical, foam and/or water fog.

Unsuitable Extinguishing Media

Water spray or fog can cool fire but may not be effective in extinguishing fire.

Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

· Containers may explode when heated.

Vapor explosion hazard indoors, outdoors or in sewers.

Combustible material: may burn but does not ignite readily.

Many liquids are lighter than water.

Most vapors are heavier than air. They will spread along ground and collect in low or

confined areas (sewers, basements, tanks).

Runoff to sewer may create fire or explosion hazard.

Vapors may form explosive mixtures with air.

Vapors may travel to source of ignition and flash back.

Water may cause frothing.

Hazardous Combustion Products

· No data available

Advice for firefighters

Structural firefighters' protective clothing will only provide limited protection.
 Wear positive pressure self-contained breathing apparatus (SCBA).
 Move containers from fire area if you can do it without risk.
 LARGE FIRES: Cool containers with flooding quantities of water until well after fire is out.

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal Precautions

Ventilate enclosed areas. Do not walk through spilled material. Use appropriate
Personal Protective Equipment (PPE) Do not touch damaged containers or spilled
material unless wearing appropriate protective clothing.

Emergency Procedures

As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions. LARGE SPILL: Consider initial downwind evacuation for at least 300 meters (1000 feet) ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering.

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Containment/Clean-up Measures

Stop leak if you can do it without risk.
 Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Use clean non-sparking tools to collect absorbed material. A vapor suppressing foam may be used to reduce vapors.

All equipment used when handling the product must be grounded. LARGE SPILLS: Dike far ahead of liquid spill for later disposal.

LARGE SPILLS: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Section 7 - Handling and Storage

Precautions for safe handling

Handling

Use only in well ventilated areas. Avoid contact with heat and ignition sources. Take
precautionary measures against static charges. Do not use sparking tools. All
equipment used when handling the product must be grounded. Wear appropriate
personal protective equipment, avoid direct contact. Avoid breathing mist, vapours,
spray. Avoid contact with skin, eyes, and clothing. Wash thoroughly with soap and
water after handling and before eating, drinking, or using tobacco.

Conditions for safe storage, including any incompatibilities

Storage

Store in a tightly closed container. Store in a well-ventilated place. Store below 150°
 F. Store in an area equipped with automatic sprinklers or fire extinguishing system.

 Empty containers contain product residues, assume emptied containers to have same hazards as full containers. Do not apply high heat or flame to containers. Keep separate from strong oxidizing agents.

Section 8 - Exposure Controls/Personal Protection

Control parameters

Exposure Limits/Guidelines								
	Result	ACGIH	NIOSH	OSHA				

Naphthalene	TWAs 10 ppm TWA		10 ppm TWA; 50 mg/m3 TWA	10 ppm TWA; 50 mg/m3 TWA	
(91-20-3)	STELs	Not established	15 ppm STEL; 75 mg/m3 STEL	Not established	
1- Methylethylbenzene (98-82-8)	TWAs	50 ppm TWA	50 ppm TWA; 245 mg/m3 TWA	50 ppm TWA; 245 mg/m3 TWA	
Xylene	TWAs	100 ppm TWA	Not established	100 ppm TWA; 435 mg/m3 TWA	
(1330-20-7)	STELs	150 ppm STEL	Not established	Not established	
1,2,3- Trimethylbenzene (526-73-8)	TWAs	Not established	25 ppm TWA; 125 mg/m3 TWA	Not established	
1,2,4- Trimethylbenzene (95-63-6)	TWAs	Not established	25 ppm TWA; 125 mg/m3 TWA	Not established	
1,3,5- Trimethylbenzene (108-67-8)	TWAs	Not established	25 ppm TWA; 125 mg/m3 TWA	Not established	
Proprietary	TWAs	100 ppm TWA	100 ppm TWA; 600 mg/m3 TWA	100 ppm TWA; 600 mg/m3 TWA	
(Proprietary)	STELs	150 ppm STEL	150 ppm STEL; 900 mg/m3 STEL	Not established	

Exposure controls

Engineering Measures/Controls

 Good general ventilation 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. Use only appropriately classified electrical equipment.

Personal Protective Equipment

Respiratory

 In case of insufficient ventilation, wear suitable respiratory equipment. Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use a NIOSH/MSHA approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

Wear chemical splash safety goggles.

Skin/Body

Wear appropriate gloves.

Environmental Exposure Controls

Controls should be engineered to prevent release to the environment, including
procedures to prevent spills, atmospheric release and release to waterways. Follow
best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

STEL = Short Term Exposure Limits are based on 15-minute exposures
TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Amber liquid with a solvent odor.
Color	Amber	Odor	Solvent
Odor Threshold	No data available		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	-40 F(-40 C)
Decomposition Temperature	> 212 F(> 100 C)	рН	No data available
Specific Gravity/Relative Density	= 0.86 Water=1	Water Solubility	Negligible < 0.1 %

Viscosity	4 Centistoke (cSt, cS) or mm2/sec	1	
Volatility			
Vapor Pressure	0.035 mmHg (torr)	Vapor Density	4.5 Air=1
Evaporation Rate	< 1 n-Butyl Acetate = 1	VOC (Wt.)	100 %
VOC (Vol.)	100 %	Volatiles (Wt.)	100 %
Volatiles (Vol.)	100 %		
Flammability	-		
Flash Point	170 F(76.6667 C) CC (Closed Cup)	UEL	5.5 %
LEL	0.6 %	Autoignition	215 C(419 F)
Flammability (solid, gas)	No data available		

Section 10: Stability and Reactivity

Reactivity

• No dangerous reaction known under conditions of normal use.

Chemical stability

· Stable under normal temperatures and pressures.

Possibility of hazardous reactions

· Hazardous polymerization will not occur.

Conditions to avoid

• Keep away from heat, sparks, and flame. Incompatible materials.

Incompatible materials

· Strong oxidants.

Hazardous decomposition products

 Decomposes with heat. Hazardous gases/vapors produced are oxides of nitrogen and carbon monoxide. Decomposition temperature is >212°F.

Section 11 - Toxicological Information

Information on toxicological effects

		Components
2-Ethylhexyl nitrate (0% 27247-96- TO 24%)		Acute Toxicity: Ingestion/Oral-Rat LD50 • >10 mL/kg; Skin-Rabbit LD50 • >5 mL/kg; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 2800 mg/kg 28 Day(s)-Continuous; Liver:Changes in liver weight; Kidney, Ureter, and Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis); Kidney, Ureter, and Bladder:Other changes in urine composition
Solvent naphtha (0% TO 6%)	64742-94- 5	Acute Toxicity: Inhalation-Rat LC50 • >590 mg/m³ 4 Hour(s); Skin-Rabbit LD50 • >2 mL/kg; Behavioral:Somnolence (general depressed activity); Behavioral:Changes in motor activity (specific assay); Behavioral:Irritability; Irritation: Skin-Rabbit • 500 µL 24 Hour(s) • Mild irritation
1,2,4-Trimethylbenzene (0% TO 4%)	95-63-6	Acute Toxicity: Ingestion/Oral-Rat LD50 • 5 g/kg; Inhalation-Rat LC50 • 18000 mg/m³ 4 Hour(s); Multi-dose Toxicity: Inhalation-Rat TCLo • 100 ppm 6 Hour(s) 20 Day(s)-Intermittent; Behavioral:Changes in motor activity (specific assay); Behavioral:Analgesia; Behavioral:Alteration of operant conditioning; Inhalation-Rat TCLo • 20 mg/m³ 16 Week(s)-Continuous; Kidney, Ureter, and Bladder:Other changes in urine composition
		Acute Toxicity: Ingestion/Oral-Rat LD50 • 490 mg/kg; Ingestion/Oral-Mouse TDLo • 158 mg/kg; Brain and Coverings:Other degenerative changes; Liver:Other changes; Biochemical:Metabolism (intermediary):Lipids, including transport; Inhalation-Human TCLo • 250 mg/m³; Sense Organs and Special Senses:Eye:Lacrimation; Behavioral:Headache; Skin-Rabbit LD50 • >20 g/kg; Unreported-

Naphthalene (0% TO 0.499%)	91-20-3	Guinea Pig LD50 • 1200 mg/kg; Behavioral:Somnolence (general depressed activity); Irritation: Skin-Rabbit • 0.05 mL 24 Hour(s) • Severe irritation; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 500 mg/kg 10 Day(s)-Intermittent; Behavioral:Sleep; Lungs, Thorax, or Respiration:Dyspnea; Ingestion/Oral-Rat TDLo • 4500 mg/kg 10 Day(s)-Intermittent; Brain and Coverings:Other degenerative changes; Mutagen: Specific locus test • Inhalation-Rat • 30 ppm 13 Week(s)-Intermittent; Micronucleus test • Unreported Route-Human • Lymphocyte (Somatic cell) • 30 mg/L; Reproductive: Ingestion/Oral-Mouse TDLo • 2400 mg/kg (7-14D preg); Reproductive Effects:Effects on Newborn:Live birth index; Reproductive Effects:Effects on Newborn:Viability index (e.g., # alive at day 4 per # born alive); Ingestion/Oral-Rat TDLo • 4500 mg/kg (6-15D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Other developmental abnormalities; Tumorigen / Carcinogen: Inhalation-Mouse TCLo • 30 ppm 6 Hour(s) 2 Year(s)-Intermittent; Tumorigenic:Neoplastic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Inhalation-Rat TCLo • 1575 mg/kg 105 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors; Inhalation-Rat TCLo • 60 ppm 6 Hour(s) 105 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors
Solvent naphtha (petroleum), light aromatic (0% TO 3.7%)	64742-95- 6	Acute Toxicity: Ingestion/Oral-Rat LD50 • 8400 mg/kg; Behavioral:Somnolence (general depressed activity); Behavioral:Tremor; Lungs, Thorax, or Respiration:Other changes; Irritation: Eye-Rabbit • 100 µL 24 Hour(s) • Mild irritation; Reproductive: Inhalation-Rat TCLo • 1500 ppm (9W male/9W pre-16D post); Reproductive Effects:Effects on Newborn:Growth statistics (e.g., reduced weight gain)
1,3,5-Trimethylbenzene (0% TO 0.6%)	108-67-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • 5000 mg/kg; Inhalation-Rat LC50 • 24000 mg/m³ 4 Hour(s); Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Rat TCLo • 100 ppm 6 Hour(s) 20 Day(s)-Intermittent; Behavioral:Changes in motor activity (specific assay); Behavioral:Analgesia; Behavioral:Alteration of operant conditioning; Inhalation-Rat TCLo • 20 mg/m³ 16 Week(s)-Continuous; Kidney, Ureter, and Bladder:Other changes in urine composition
1,2,3-Trimethylbenzene (0% TO 0.6%)	526-73-8	Multi-dose Toxicity: Inhalation-Rat TCLo • 100 ppm 6 Hour(s) 20 Day(s)-Intermittent; Behavioral:Alteration of classical conditioning
1-Methylethylbenzene (0% TO 0.12%)	98-82-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • 1400 mg/kg; Gastrointestinal:Gastritis; Inhalation-Rat LC50 • 39000 mg/m³ 4 Hour(s); Inhalation-Human TCLo • 200 ppm; Behavioral:Somnolence (general depressed activity); Behavioral:Antipsychotic; Behavioral:Irritability; Inhalation-Mouse TCLo • 5150 mg/m³ 2 Hour(s); Behavioral:General anesthetic; Inhalation-Rat TCLo • 300 ppm 30 Minute(s); Lungs, Thorax, or Respiration:Respiratory depression; Skin-Rabbit LD50 • 12300 μL/kg; Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 100 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Mouse TCLo • 2000 mg/m³ 14 Week(s)-Continuous; Behavioral:Somnolence (general depressed activity); Inhalation-Rabbit TCLo • 10000 mg/m³ 2 Hour (s) 24 Week(s)-Intermittent; Lungs, Thorax, or Respiration:Acute pulmonary edema; Blood:Hemorrhage; Blood:Changes in leucocyte (WBC) count; Inhalation-Rat TCLo • 1200 ppm 6 Hour(s) 13 Week(s)-Intermittent; Sense Organs and Special Senses:Eye:Other; Behavioral:Changes in motor activity (specific assay); Blood:Pigmented or nucleated red blood cells; Mutagen: Mutation in microorganisms • Unreported Route-Salmonella typhimurium • 100 μg/plate 3 Hour(s) (-S9)
Xylene (0% TO 0.5%)	1330-20-7	Acute Toxicity: Ingestion/Oral-Rat LD50 • 4300 mg/kg; Liver:Other changes; Kidney, Ureter, and Bladder:Other changes; Inhalation-Rat LC50 • 5000 ppm 4 Hour(s); Inhalation-Human TCLo • 200 ppm; Sense Organs and Special Senses:Olfaction:Other changes; Sense Organs and Special Senses:Eye:Conjunctive irritation; Lungs, Thorax, or Respiration:Other changes; Skin-Rabbit LD50 • >1700 mg/kg; Irritation: Eye-Rabbit • 5 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Rat TCLo • 1000 ppm 6 Hour(s) 8 Day(s)-Intermittent; Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain; Reproductive: Inhalation-Rabbit TCLo • 1 g/m³ 24 Hour(s)(7-20D preg); Reproductive Effects:Effects on Fertility:Abortion; Inhalation-Rat TCLo • 50 mg/m³ 6 Hour(s)(1-21D preg); Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity

	(except death, e.g., stunted fetus); Reproductive Effects: Specific Developmental Abnormalities: Craniofacial (including nose and tongue); Inhalation-Rat TDLo • 200 ppm 6 Ho 20D preg); Reproductive Effects: Specific Developmental Abnormalities: Musculoskeletal syste Reproductive Effects: Effects on Newborn: Behavioral	
Proprietary (<= 10%)		Acute Toxicity: Ingestion/Oral-Rat LD50 • 5400 μL/kg; Skin-Rabbit LD50 • 10 mL/kg; Irritation: Eye-Human • 8 mg • Mild irritation; Skin-Rabbit • 500 mg-Open • Mild irritation

GHS Properties	Classification	
Respiratory sensitization	OSHA HCS 2012 • No data available	
Serious eye damage/Irritation	OSHA HCS 2012 • No data available	
Acute toxicity	OSHA HCS 2012 • No data available	
Aspiration Hazard	OSHA HCS 2012 • Aspiration 1	
Carcinogenicity	OSHA HCS 2012 • Carcinogenicity 2	
Skin corrosion/Irritation	OSHA HCS 2012 • No data available	
Skin sensitization	OSHA HCS 2012 • No data available	
STOT-RE	OSHA HCS 2012 • No data available	
STOT-SE	OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects	
Toxicity for Reproduction	OSHA HCS 2012 • Toxic to Reproduction 1B	
Germ Cell Mutagenicity	OSHA HCS 2012 • No data available	

Potential Health Effects

Inhalation

Acute (Immediate)

- May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.
- **Chronic (Delayed)**

· No data available.

Skin

Acute (Immediate)

Chronic (Delayed)

Material is classified as non-irritant and non-corrosive using GHS criteria.

No data available.

Eye

Acute (Immediate)

Material is classified as non-irritant using GHS criteria.

Chronic (Delayed)

No data available.

Ingestion

Acute (Immediate)

 Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death.

Chronic (Delayed)

· No data available.

Carcinogenic Effects

Suspected of causing cancer. This product contains components that are considered carcinogenic by OSHA, IARC, NTP.

Carcinogenic Effects				
CAS IARC NTP				
1-Methylethylbenzene 98-82-8 Group 2B-Possible		Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen	
Naphthalene 91-20-3		Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen	

Reproductive Effects

· Animal tests for components have shown adverse reproductive effects.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

Toxicity

 Non-mandatory section - information about this substance not complied for this reason.

Persistence and degradability

Non-mandatory section - information about this substance not complied for this reason.

Bioaccumulative potential

Non-mandatory section - information about this substance not complied for this reason.

Mobility in Soil

Non-mandatory section - information about this substance not complied for this reason.

Other adverse effects

Non-mandatory section - information about this substance not complied for this reason.

Section 13 - Disposal Considerations

Waste treatment methods

Product waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	UN number	UN proper shipping name	Transport hazard class(es)	Packing group	Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA

Special precautions for user • None specified.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA Hazard Classifications • Acute, Chronic, Fire

Inventory		
Component	CAS	TSCA

1,2,3- Trimethylbenzene	526-73-8	Yes
1,2,4- Trimethylbenzene	95-63-6	Yes
1,3,5- Trimethylbenzene	108-67-8	Yes
1- Methylethylbenzene	98-82-8	Yes
Proprietary	Proprietary	Yes
Distillates (petroleum), hydrotreated light	64742-47-8	Yes
Naphthalene	91-20-3	Yes
2-Ethylhexyl nitrate	27247-96-7	Yes
Solvent naphtha	64742-94-5	Yes
Solvent naphtha (petroleum), light aromatic	64742-95-6	Yes
Xylene	1330-20-7	Yes

United States

Labor			
U.S OSHA - Process Safety Management - Highly Hazardous Chemica			
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed	
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed	
Naphthalene	91-20-3	Not Listed	
1-Methylethylbenzene	98-82-8	Not Listed	
Proprietary	Proprietary	Not Listed	
Xylene	1330-20-7	Not Listed	
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed	
 Solvent naphtha (petroleum), light aromatic 	64742-95-6	Not Listed	
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed	
Solvent naphtha	64742-94-5	Not Listed	
2-Ethylhexyl nitrate	27247-96-7	Not Listed	
U.S OSHA - Specifically Regulated Chemicals			
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed	
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed	
Naphthalene	91-20-3	Not Listed	
1-Methylethylbenzene	98-82-8	Not Listed	
Proprietary	Proprietary	Not Listed	
• Xylene	1330-20-7	Not Listed	
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed	
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed	
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed	
Solvent naphtha	64742-94-5	Not Listed	
2-Ethylhexyl nitrate	27247-96-7	Not Listed	
- , - , - 			

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Distillates (petroleum), hydrotreated light 64742-47-8 Not Listed

• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	
1-Methylethylbenzene	98-82-8	
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	(isomers and mixtures)
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
IIS CAA (Clean Air Act) Accidental Balance Broventian Flammable Substance		
 U.S CAA (Clean Air Act) - Accidental Release Prevention - Flammable Substanc Distillates (petroleum), hydrotreated light 	64742-47-8	Not Listed
	526-73-8	Not Listed
• 1,2,3-Trimethylbenzene	91-20-3	
Naphthalene Methylethylbograps	91-20-3	Not Listed Not Listed
• 1-Methylethylbenzene		
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S CAA (Clean Air Act) - Accidental Release Prevention - Toxic Substances		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
• Naphthalene	91-20-3	Not Listed
1-Methylethylbenzene	98-82-8	Not Listed
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
2-Lutymexyr mudic	21241-30-1	Not Elsted
U.S CERCLA/SARA - Hazardous Substances and their Reportable Quantities		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	100 lb final RQ; 45.4 kg final RQ
• 1-Methylethylbenzene	98-82-8	5000 lb final RQ; 2270 kg final RQ
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	100 lb final RQ; 45.4 kg final RQ
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs		

Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
1-Methylethylbenzene	98-82-8	Not Listed
 Proprietary 	Proprietary	Not Listed
Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
 Solvent naphtha (petroleum), light aromatic 	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S. OFFICIA/OADA O. //. O40 F D. //.		
U.S CERCLA/SARA - Section 313 - Emission Reporting	04740 47 0	Not Listed
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	0.1 % de minimis concentration
1-Methylethylbenzene	98-82-8	1.0 % de minimis concentration
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	1.0 % de minimis concentration
• 1,2,4-Trimethylbenzene	95-63-6	1.0 % de minimis
•		concentration
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical Listing		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
1-Methylethylbenzene	98-82-8	Not Listed
• Proprietary	Proprietary	Not Listed
Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed

J.S CWA (Clean Water Act) - Hazardous Substances Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
1,2,3-Trimethylbenzene	526-73-8	Not Listed
	91-20-3	NOI LISIEU
Naphthalene		Not Listed
1-Methylethylbenzene	98-82-8	Not Listed
Proprietary	Proprietary	Not Listed
Xylene	1330-20-7	
1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
J.S CWA (Clean Water Act) - Toxic Pollutants		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	
1-Methylethylbenzene	98-82-8	Not Listed
Proprietary	Proprietary	Not Listed
Xylene	1330-20-7	Not Listed
1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
	108-67-8	Not Listed
1,3,5-Trimethylbenzene Solvent naphtha	64742-94-5	Not Listed

United States - California

Environment		
U.S California - Proposition 65 - Carcinogens List		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	carcinogen, initial date 4/19/02
• 1-Methylethylbenzene	98-82-8	carcinogen, initial date 4/6/10
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
 Solvent naphtha (petroleum), light aromatic 	64742-95-6	Not Listed
1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
Proprietary	Proprietary	Not Listed
Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed

U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)	64740 47 0	Not Listed
Distillates (petroleum), hydrotreated light	64742-47-8 526-73-8	Not Listed Not Listed
1,2,3-TrimethylbenzeneNaphthalene	91-20-3	Not Listed
	98-82-8	Not Listed
1-Methylethylbenzene Proprietory		
Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL)		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	5.8 μg/day NSRL
1-Methylethylbenzene	98-82-8	Not Listed
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male	04740 47 0	Not Listed
Distillates (petroleum), hydrotreated light	64742-47-8	Not Listed
• 1,2,3-Trimethylbenzene	526-73-8	Not Listed
Naphthalene	91-20-3	Not Listed
1-Methylethylbenzene Respiratory	98-82-8	Not Listed
Proprietary	Proprietary	Not Listed
• Xylene	1330-20-7	Not Listed
• 1,2,4-Trimethylbenzene	95-63-6	Not Listed
Solvent naphtha (petroleum), light aromatic	64742-95-6	Not Listed
• 1,3,5-Trimethylbenzene	108-67-8	Not Listed
Solvent naphtha	64742-94-5	Not Listed
2-Ethylhexyl nitrate	27247-96-7	Not Listed

Other Information

 WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Revision Date

Preparation Date

Other Information

Disclaimer/Statement of Liability

• 16/October/2015

16/October/2015

• Schedule B Number: 3811.19.0000.

Information presented herein is believed to be factual, as it has been derived from the
works and opinions of persons believed to be qualified experts. However, nothing
contained in this information is to be taken as warranty or representation for which the
Gold Eagle Co. bears legal responsibility. The user should review any
recommendations in the specific context of the intended use to determine whether
they are appropriate.

Key to abbreviations NDA = No Data Available

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29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : NAPA® MAC'S

STARTING FLUID

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet
Niteo Products, LLC
P.O. Box 191629
Dallas TX 75219
United States of America

Emergency telephone number
CHEMTREC DIRECT 1-800-424-9300

Product Information
1-844-696-4836

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable aerosols : Category 1

Carcinogenicity : Category 2

Reproductive toxicity : Category 2

Specific target organ systemic toxicity - single

exposure

: Category 3 (Central nervous system)

Aspiration hazard : Category 1

GHS Label element

Hazard pictograms





Signal Word : Danger

Hazard Statements : Extremely flammable aerosol.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

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Suspected of causing cancer.

Suspected of damaging fertility or the unborn child.

Precautionary Statements

: 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.

Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

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

IF exposed or concerned: Get medical advice/ attention.

Do NOT induce vomiting.

Storage:

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

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding

50 °C/ 122 °F.

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 (%)
SOLVENT NAPHTHA	64742-89-8	Flam. Liq. 2; H225	77.53
(PETROLEUM), LIGHT			
ALIPHATIC		STOT SE 3; H336	
		Asp. Tox. 1; H304	

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ETHYL ETHER	60-29-7	Aquatic Acute 2; H401 Aquatic Chronic 2; H411 Flam. Liq. 1; H224	19.55
EINYLEINEK	60-29-7	Acute Tox. 4; H302 STOT SE 3; H336	19.55
n-HEPTANE	142-82-5	Flam. Liq. 2; H225 Skin Irrit. 2; H315 STOT SE 3; H336 Asp. Tox. 1; H304	3.10
CARBON DIOXIDE	124-38-9	Press. Gas Liquefied gas; H280	2.01
ETHANOL	64-17-5	Flam. Liq. 2; H225 Eye Irrit. 2A; H319 STOT SE 3; H336	1.17
ETHYL CHLORIDE	75-00-3	Flam. Gas 1; H220 Carc. 2; H351	0.29
TOLUENE	108-88-3	Flam. Liq. 2; H225 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Repr. 2; H361	0.13

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STOT SE 3; H336	
STOT RE 2; H373	
Asp. Tox. 1; H304	

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Call a POISON CENTRE or doctor/physician if exposed or

you feel unwell.

Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

If inhaled : Move to fresh air.

If unconscious place in recovery position and seek medical

advice.

Consult a physician after significant exposure.

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 : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

If eye irritation persists, consult a specialist.

If swallowed : Obtain medical attention.

Do NOT induce vomiting.

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

: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

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)

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Cough

loss of appetite confusion

irregular heartbeat respiratory failure

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness. Suspected of causing cancer.

Suspected of damaging fertility or the unborn child.

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

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite

explosively.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: Aldehydes

carbon dioxide and carbon monoxide

organic compounds Hydrocarbons formaldehyde-like

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. Use a water spray to cool fully closed containers.

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 Evacuate personnel to safe areas.
 Remove all sources of ignition.
 Use personal protective equipment.
 Ensure adequate ventilation.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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

Suppress (knock down) gases/vapours/mists with a water

spray jet.

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).

Other information

: Comply with all applicable federal, state, and local regulations. Suppress (knock down) gases/vapours/mists with a water

spray jet.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Open drum carefully as content may be under pressure.

Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Take precautionary measures against static discharges. 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.

Container may be opened only under exhaust ventilation

hood.

Conditions for safe storage

BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or

red-hot objects.

Keep container tightly closed in a dry and well-ventilated

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place

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Observe label precautions.

No smoking.

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
TOLUENE	108-88-3	TWA	20 ppm	ACGIH
		REL	100 ppm	NIOSH/GUID
			375 mg/m3	E
		STEL	150 ppm	NIOSH/GUID
			560 mg/m3	E
		TWA	200 ppm	OSHA/Z2
		Ceiling	300 ppm	OSHA/Z2
		MAX. CONC	500 ppm	OSHA/Z2
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	TWA	500 ppm	OSHA_TRA NS
		TWA	300 ppm	ACGIH
		TWA	2,000 mg/m3	OSHA_TRA NS
		TWA	1,370 mg/m3	ACGIH
ETHYL ETHER	60-29-7	TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
		PEL	400 ppm 1,200 mg/m3	OSHA_TRA NS
		TWA	400 ppm 1,200 mg/m3	TN OEL
		STEL	500 ppm 1,500 mg/m3	TN OEL
n-HEPTANE	142-82-5	REL	85 ppm 350 mg/m3	NIOSH/GUID E
		Ceil_Time	440 ppm 1,800 mg/m3	NIOSH/GUID E
		PEL	500 ppm 2,000 mg/m3	OSHA_TRA NS
		TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
CARBON DIOXIDE	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		REL	5,000 ppm	NIOSH/GUID

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	1	1	9,000 mg/m3	E
		STEL	30,000 ppm 54,000 mg/m3	NIOSH/GUID E
		PEL	5,000 ppm 9,000 mg/m3	OSHA_TRA NS
ETHANOL	64-17-5	REL	1,000 ppm 1,900 mg/m3	NIOSH/GUID E
		PEL	1,000 ppm 1,900 mg/m3	OSHA_TRA NS
		STEL	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m3	Z1A
ETHYL CHLORIDE	75-00-3	TWA	100 ppm	ACGIH
		PEL	1,000 ppm 2,600 mg/m3	OSHA_TRA NS
		TWA	1,000 ppm 2,600 mg/m3	Z1A

Biological occupational exposure limits

Jiologicai occupat	ionai exposure	IIIIIII				
Components	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
TOLUENE	108-88-3	o-Cresol,	Creatinine	Sampling	0.3 mg/g	
		with	in urine	time: End		
		hydrolysis		of shift.		
Remarks:	Backgroun	id				
		toluene	Urine	Sampling	0.03 mg/l	
				time: End		
				of shift.		
		toluene	Blood	Sampling	0.02 mg/l	
				time: Prior		
				to last shift		
				of work		
				week.		

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

Respiratory protection

In the case of vapour formation use a respirator with an approved filter.

In the case of dust or aerosol formation use respirator with an approved filter.

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled

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release, exposure levels are not known or any other circumstances where an air-purifying respirator may not

provide adequate protection.

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

Flame-resistant clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : aerosol

Odour : No data available

Odour Threshold : No data available

pH : No data available

: No data available

Boiling point/boiling range : 94.3 °F / 34.6 °C

(1,013.232 hPa)

Calculated Phase Transition Liquid/Gas

Flash point : -49 °F / -45 °C

Calculated Flash Point

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : 36.5 %(V)

Calculated Explosive Limit

Lower explosion limit : 1.05 %(V)

Calculated Explosive Limit

Vapour pressure : 717.2616 hPa (25 °C)

Calculated Vapor Pressure

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Relative vapour density : No data available

Relative density : No data available

Density : 0.7114 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 : No data available

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

: Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

excessive heat

Incompatible materials : Acids

Alkali metals Ammonia Bases halogens

inorganic materials Oxidizing agents

sodium

Sulphur compounds

Hazardous decomposition

products

Aldehydes

carbon dioxide and carbon monoxide

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formaldehyde-like Hydrocarbons organic compounds

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation

exposure

Skin contact
Eye Contact

Eye Conta Ingestion

Acute toxicity

Not classified based on available information.

Components:

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:
Acute oral toxicity : LD 50 (Rat): > 8,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 3400 ppm

Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD 50 (Rat): > 4,000 mg/kg

ETHYL ETHER:

Acute oral toxicity : LD50 (Rat): 1,200 - 1,700 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 32,000 mg/l

Exposure time: 4 h

n-HEPTANE:

Acute oral toxicity : LD 50 (Rat): Expected > 5,000 mg/kg

Remarks: Information given is based on data obtained from

similar substances.

Acute inhalation toxicity : LC 50 (Rat, male and female): > 29.29 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

Assessment: No adverse effect has been observed in acute

inhalation toxicity tests.

Acute dermal toxicity : LD 50 (Rabbit): Expected > 2,000 mg/kg

Assessment: Not classified as acutely toxic by dermal

absorption under GHS.

Remarks: Information given is based on data obtained from

similar substances.

ETHANOL:

Acute oral toxicity : LD 50 (Rat): 7,060 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 117 - 125 mg/l

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Exposure time: 4 h

LC 50 (Mouse): 39 mg/l Exposure time: 4 h

Acute dermal toxicity : LD Lo (Rabbit): 20 g/kg

ETHYL CHLORIDE:

Acute inhalation toxicity : LC 50 (Rat): > 19000 ppm

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

TOLUENE:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 8000 ppm

Exposure time: 4 h

Acute dermal toxicity : LD 50 (Rabbit): 12,124 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Result: Repeated exposure may cause skin dryness or cracking.

Components:

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Result: Mildly irritating to skin

ETHYL ETHER:

Result: Irritating to skin

n-HEPTANE:

Result: Irritating to skin

CARBON DIOXIDE:

Result: Not irritating to skin

ETHANOL:

Result: Slightly irritating to skin

ETHYL CHLORIDE:

Result: Mildly irritating to skin

TOLUENE:

Result: Irritating to skin

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

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Components:

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Result: Mildly irritating to eyes

ETHYL ETHER:

Result: Severely irritating to eyes

n-HEPTANE:

Result: Mildly irritating to eyes

CARBON DIOXIDE:

Result: Not irritating to eyes

ETHANOL:

Result: Irritating to eyes

ETHYL CHLORIDE:

Result: Mildly irritating to eyes

TOLUENE:

Result: Irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Components: n-HEPTANE:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components: n-HEPTANE:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Test species: rat hepatocytes Method: OECD Test Guideline 473

Result: negative

: Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Carcinogenicity

Suspected of causing cancer.

Components:

ETHYL CHLORIDE:

Carcinogenicity - : Limited evidence of carcinogenicity in animal studies

Assessment

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Reproductive toxicity

Suspected of damaging fertility or the unborn child.

Components:

TOLUENE:

Reproductive toxicity - : Some evidence of adverse effects on development, based on

Assessment animal experiments.

STOT - single exposure

May cause drowsiness or dizziness.

Components: ETHYL ETHER:

Assessment: May cause drowsiness or dizziness.

n-HEPTANE:

Assessment: May cause drowsiness or dizziness.

ETHANOL:

Assessment: May cause drowsiness or dizziness.

TOLUENE:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Components:

TOLUENE:

Exposure routes: Inhalation

Target Organs: Neurologic: other (neuropsychological effects, auditory dysfunction and effects

on colour vision)

Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

May be fatal if swallowed and enters airways.

Product:

May be fatal if swallowed and enters airways.

Components:

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

May be fatal if swallowed and enters airways.

n-HEPTANE:

May be fatal if swallowed and enters airways.

TOLUENE:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

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Components:

ETHYL CHLORIDE: Remarks: Liver

Remarks: Central nervous system

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.

OSHANo 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

n-HEPTANE:

Toxicity to daphnia and other

aquatic invertebrates

: EC 50 (Water flea (Daphnia magna)): 1.5 mg/l

Exposure time: 48 h Test Type: static test

LC 50 (Mysidopsis bahia (opossum shrimp)): 0.1 mg/l

Exposure time: 96 h
Test Type: semi-static test

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOELR (Water flea (Daphnia magna)): 1 mg/l

Exposure time: 21 d Test Type: static test Test substance: WAF

Method: OECD Test Guideline 211

Remarks: Information given is based on data obtained from

similar substances.

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

ETHANOL:

Toxicity to fish : LC 50 (Rainbow trout, donaldson trout (Oncorhynchus

mykiss)): 12,000 - 16,000 mg/l

Exposure time: 96 h

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Test Type: static test

Toxicity to daphnia and other

aquatic invertebrates

EC 50 (Water flea (Daphnia magna)): > 10,000 mg/l

Exposure time: 48 h Test Type: static test

ETHYL CHLORIDE:

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Water flea (Daphnia magna)): 58 mg/l

Exposure time: 48 h Test Type: static test

Method: Directive 67/548/EEC, Annex V, C.2.

Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 118 mg/l

End point: Growth inhibition

Exposure time: 72 h Test Type: static test

Method: Directive 67/548/EEC, Annex V, C.3.

TOLUENE:

Toxicity to fish : LC50 (Oncorhynchus kisutch (coho salmon)): 5.5 mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Water flea (Ceriodaphnia dubia)): 3.78 mg/l

Exposure time: 48 h Remarks: Mortality

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): > 433

mg/l

End point: Growth inhibition

Exposure time: 96 h

NOEC (Scenedesmus quadricauda (Green algae)): > 400

mg/l

End point: Growth inhibition

Exposure time: 7 d

Toxicity to fish (Chronic

toxicity)

: NOEC (Oncorhynchus mykiss (rainbow trout)): 1.39 mg/l

Exposure time: 40 d

Test Type: flow-through test

Toxicity to daphnia and other

aquatic invertebrates

(Chronic toxicity)

: NOEC (Water flea (Ceriodaphnia dubia)): 0.74 mg/l

Exposure time: 7 d

Persistence and degradability

n-HEPTANE:

Biodegradability : Result: Readily biodegradable

ETHYL CHLORIDE:

Biodegradability : Inoculum: activated sludge

Result: Not readily biodegradable.

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Biodegradation: 0 % Exposure time: 28 d

Method: Directive 67/548/EEC Annex V, C.4.E.

TOLUENE:

Biodegradability : Result: Readily biodegradable

Bioaccumulative potential

ETHYL ETHER:

Partition coefficient: n-

octanol/water

: log Pow: 0.89

n-HEPTANE:

Partition coefficient: n-

octanol/water

: log Pow: 4.66

ETHANOL:

Partition coefficient: n-

octanol/water

: log Pow: -0.31

ETHYL CHLORIDE:

Partition coefficient: n-

octanol/water

: log Pow: 1.43

TOLUENE:

Bioaccumulation : Species: Ide, silver or golden orfe (Leuciscus idus)

Bioconcentration factor (BCF): 94

Exposure time: 3 d Concentration: 0.05 mg/l Method: Not reported

Partition coefficient: n-

octanol/water

: log Pow: 2.73

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., Toxic to aquatic life with

long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : The product should not be allowed to enter drains, water

courses or the soil.

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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.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

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

UN	1950	Aerosols	2.1	LIMITED
				QUANTITY

U.S. DOT - RAIL

UN	1950	Aerosols	2.1	LIMITED
				QUANTITY

U.S. DOT - INLAND WATERWAYS

UN	1950	Aerosols	2.1	LIMITED QUANTITY
				QUANTITI

TRANSPORT CANADA - ROAD

UN	1950	AEROSOLS	2.1	LIMITED QUANTITY

TRANSPORT CANADA - RAIL

UN	1950	AEROSOLS	2.1	LIMITED
				QUANTITY

TRANSPORT CANADA - INLAND WATERWAYS

UN	1950	AEROSOLS	2.1	LIMITED QUANTITY

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INTERNATIONAL MARITIME DANGEROUS GOODS

UN 1950	O AEROSOLS	2.1	MARINE
			POLLUTANT:(
			ALIPHATIC
			PETROLEUM
			NAPHTHA)

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN	1950	Aerosols, flammable (engine starting fluid)	2.1
		· · ·	

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	1950	Aerosols, flammable (engine starting fluid)	2.1

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	1950	AEROSOLES	2

*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

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ETHYL ETHER	60-29-7	100	511.380779

SARA 311/312 Hazards : Chronic Health Hazard

Fire Hazard

Acute Health Hazard

SARA 313

Component(s)SARA 313 known

: 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.

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Pennsylvania	Right To Know SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	70.00 - 90.00 %
	ETHYL ETHER	60-29-7	10.00 - 20.00 %
	n-HEPTANE	142-82-5	1.00 - 5.00 %
	CARBON DIOXIDE	124-38-9	1.00 - 5.00 %
	ETHANOL	64-17-5	1.00 - 5.00 %
New Jersey R	i ght To Know SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	70.00 - 90.00 %
	ETHYL ETHER	60-29-7	10.00 - 20.00 %
	n-HEPTANE	142-82-5	1.00 - 5.00 %
	CARBON DIOXIDE	124-38-9	1.00 - 5.00 %
	ETHANOL	64-17-5	1.00 - 5.00 %
	DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-53-6	0.10 - 1.00 %
	TOLUENE	108-88-3	0.10 - 1.00 %

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.

AICS : On the inventory, or in compliance with the inventory

ENCS : Not in compliance with the inventory

KECI : 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

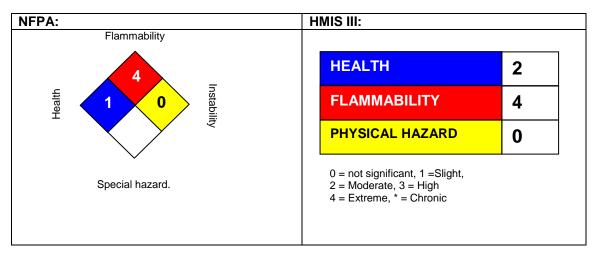
AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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SECTION 16. OTHER INFORMATION

Further information

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NFPA Flammable and Combustible Liquids Classification

Not applicable

Full text of H-Statements referred to under sections 2 and 3.

H220	Extremely flammable gas.
H224	Extremely flammable liquid and vapor.
H225	Highly flammable liquid and vapor.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H333	May be harmful if inhaled.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life.
H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Sources of key data used to compile the Safety Data Sheet Internal data including own and sponsored test reports

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The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

Cefic, the European Chemical Industry Council.

ESIS European Chemical Substances Information System

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 Niteo's Environmental Health and Safety Department (1-844-696-4836).

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

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PMRA : Health Canada Pest Management Regulatory Agency RTK : Right to Know WHMIS : Workplace Hazardous Materials Information System



Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 08/04/2014 : Version:

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Trade name : JOHNSEN'S 20% STARTING FLUID 10.7 OZ.

Product code : 6762

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Starting Fluid

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)

Flam. Aerosol 1 H222
Compressed gas Skin Irrit. 2 H315
Muta. 1B H340
Carc. 1A H350
Repr. 2 H361
STOT SE 3 H336
STOT RE 2 H373

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



 \Diamond

GHS04



GHS07



GHS02

GL

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H222 - Extremely flammable aerosol

H280 - Contains gas under pressure; may explode if heated

H315 - Causes skin irritation

H336 - May cause drowsiness or dizziness

H340 - May cause genetic defects

H350 - May cause cancer

H361 - Suspected of damaging fertility or the unborn child

H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) : P201 - Obtain special instructions

P202 - Do not handle until all safety precautions have been read and understood P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking

P211 - Do not spray on an open flame or other ignition source P251 - Pressurized container: Do not pierce or burn, even after use

P260 - Do not breathe dust,fumes,gas,mist,vapor spray P261 - Avoid breathing dust,fume,gas,mist,vapor spray P264 - Wash affected areas thoroughly after handling P271 - Use only outdoors or in a well-ventilated area

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

P302+P352 - If on skin: Wash with plenty of soap and water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

P308+P313 - If exposed or concerned: Get medical advice/attention P312 - Call a POISON CONTROL CENTER, doctor, if you feel unwell.

P312 - Call a POISON CONTROL CENTER, doctor, ii
P314 - Get medical advice/attention if you feel unwell
P321 - Specific treatment: See section 4.1 on SDS

P332+P313 - If skin irritation occurs: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse P403+P233 - Store in a well-ventilated place. Keep container tightly closed

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P405 - Store locked up

P410+P403 - Protect from sunlight. 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/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

: Contains gas under pressure; may explode if heated.

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	%	Classification (GHS-US)
Heptane, Branched Cyclic	(CAS No) 426260-76-6	32.408 - 47.3	Flam. Liq. 1, H224 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Petroleum Gases, Liquefied, Sweetened	(CAS No) 68476-86-8	10 - 30	Flam. Gas 1, H220 Flam. Liq. 1, H224
Heptane	(CAS No) 142-82-5	10.025 - 21.285	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Diethyl Ether	(CAS No) 60-29-7	10 - 30	Flam. Liq. 1, H224 Acute Tox. 4 (Oral), H302
Carbon Dioxide, Liquefied, Under Pressure	(CAS No) 124-38-9	5 - 10	Compressed gas, H280
Toluene	(CAS No) 108-88-3	0.473 - 1.892	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304
Distillates (Petroleum), Hydrotreated Heavy Naphthenic	(CAS No) 64742-52-5	< 1	Not classified

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 exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation

: Cough. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact

: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact

: Direct contact with the eyes is likely to be irritating. 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.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries

: May cause genetic defects. Suspected of damaging fertility or the unborn child. Causes damage to organs.

Symptoms/injuries after inhalation

: Shortness of breath. May cause cancer by inhalation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact

: Causes skin irritation. Itching. Red skin.

Symptoms/injuries after eye contact

: May cause severe irritation. May cause slight eye irritation . Irritation of the eye tissue. Inflammation/damage of the eye tissue. Redness of the eye tissue.

Symptoms/injuries after ingestion

: May be harmful if swallowed and enters airways. May be fatal if swallowed and enters airways.

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.

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5.2. Special hazards arising from the substance or mixture

Fire hazard : Extremely flammable aerosol.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns

and iniuries.

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. DO NOT fight fire when fire

reaches explosives. Evacuate area.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Other information : Aerosol level 3.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Ventilate area. No open flames. No smoking. Isolate from fire, if possible, without unnecessary

risk. Remove ignition sources. Use special care to avoid static electric charges.

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. Avoid breathing dust, fume, gas, mist, vapor spray.

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. Contain released substance, pump into suitable containers. Plug the leak,

cut off the supply.

Methods for cleaning up : 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

Additional hazards when processed : Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or burn,

even after use.

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. Do not spray on an open flame or other ignition source. Obtain special instructions. Do not handle until all safety precautions have been read and understood. Eliminate all ignition sources if safe to do so. Avoid breathing dust,fume,gas,mist,vapor spray. Use only outdoors or in

a well-ventilated area.

Hygiene measures : Wash affected areas thoroughly after handling. Wash contaminated clothing before reuse. Do

not eat, drink or smoke when using this product. 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 : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Do not expose to

temperatures exceeding 50 °C/122 °F. Keep in fireproof place. Keep container tightly closed.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight. Heat sources.

Storage area : Store in a well-ventilated place.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Diethyl Ether (60-29-7)		
USA ACGIH	ACGIH TWA (mg/m³)	1200
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (mg/m³)	1500 mg/m³

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Diethyl Ether (60-29-7)		
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	1200 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm

Toluene (108-88-3)		
USA ACGIH	ACGIH TWA (mg/m³)	75 mg/m³
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm

Heptane (142-82-5)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (ppm)	400 ppm

Heptane, Branched Cyclic (426260-76-6) USA ACGIH ACGIH TWA (ppm) 400 ppm		
		400 ppm
USA ACGIH ACGIH STEL (ppm) 500 ppm USA OSHA OSHA PEL (TWA) (ppm) 500 ppm		500 ppm
		500 ppm

Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5)		
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³ MIST 8 HOURS
USA OSHA OSHA PEL (TWA) (mg/m³) 5 mg/m³ MIST 8 HOURS		5 mg/m³ MIST 8 HOURS

Carbon Dioxide, Liquefied, Under Pressure (124-38-9)		
USA ACGIH	ACGIH TWA (mg/m³)	9000 mg/m³
USA ACGIH	ACGIH TWA (ppm)	5000 ppm
USA ACGIH	ACGIH STEL (mg/m³)	54000
USA ACGIH	ACGIH STEL (ppm)	30000 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	9000 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	5000 ppm

Petroleum Gases, Liquefied, Sweetened (68476-86-8) USA ACGIH ACGIH TWA (ppm) 1000 ppm Listed under Aliphatic hydrocarbon gases alkane C1-C4		
		, , , , ,
USA OSHA	OSHA PEL (TWA) (mg/m³)	1800 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation.

Personal protective equipment : Gloves. Protective goggles. 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 : Where exposure through inhalation may occur from use, respiratory protection equipment is

recommended.

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 : Gas

Color : Colourless to light yellow.

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Odor : Ether-like odour. Sweet. Pungent.

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 : -42 °C (Lowest Component)
Flash point : <-23 °C (Lowest Component)

Auto-ignition temperature : 180 °C

Decomposition temperature : No data available : No data available Flammability (solid, gas) Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : No data available : No data available Solubility Log Pow : No data available Log Kow : No data available Viscosity, kinematic : No data available : No data available Viscosity, dynamic Explosive properties : No data available Oxidizing properties : No data available Explosive limits : No data available

9.2. Other information

VOC content : 93.3 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Heat. Sparks. Open flame. Overheating.

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 : Not classified

Diethyl Ether (60-29-7)	
LD50 oral rat	1215 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 1600 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 14200 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	99 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	32000 ppm/4h (Rat)

Toluene (108-88-3)	
LD50 oral rat	5580 mg/kg body weight (Rat; Equivalent or similar to OECD 401; Literature study; 5580 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 5000 mg/kg body weight LD50 quoted as 14.1 mL/kg (12267 mg/kg using density of 0.87)
LC50 inhalation rat (mg/l)	> 28.1 mg/l/4h (Rat; Air, Literature study)

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LC50 inhalation rat (ppm)

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Heptane (142-82-5)	
LD50 oral rat	> 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)
LD50 dermal rabbit	> 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across)
LC50 inhalation rat (mg/l)	103 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	25000 ppm/4h (Rat; Literature study)
Heptane, Branched Cyclic (426260-76-6)	
LD50 oral rat	> 15000 mg/kg (Rat; Equivalent or similar to OECD 401; Literature study; >5000 mg/kg bodyweight; Rat; Read-across)
LD50 dermal rabbit	> 3160 mg/kg (Rabbit; Literature study; Equivalent or similar to OECD 402; >2000 mg/kg bodyweight; Rabbit; Read-across)
LC50 inhalation rat (mg/l)	103 mg/l/4h (Rat; Literature study)

Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5)	
LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg body weight
LC50 inhalation rat (mg/l)	> 5.2 mg/l/4h

25000 ppm/4h (Rat; Literature study)

Skin corrosion/irritation : Causes skin irritation. : Not classified Serious eye damage/irritation Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : May cause genetic defects.

Carcinogenicity : May cause cancer.

Toluene (108-88-3)	
IARC group 3	

IARC group	3
Distillates (Petroleum) Hydrotreated Heavy N	anhthenic (64742-52-5)

Distillates (Petroleum), Hydrotreated Heavy Naphthenic (64742-52-5)	
IARC group	3

: Suspected of damaging fertility or the unborn child. Reproductive toxicity

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

exposure)

Aspiration hazard : Not classified Potential Adverse human health effects and

Specific target organ toxicity (repeated

symptoms

Symptoms/injuries after inhalation

: Based on available data, the classification criteria are not met.

: May cause damage to organs through prolonged or repeated exposure.

: Shortness of breath. May cause cancer by inhalation. May cause drowsiness or dizziness. Symptoms/injuries after skin contact : Causes skin irritation. Itching. Red skin.

: May cause severe irritation. May cause slight eye irritation . Irritation of the eye tissue. Symptoms/injuries after eye contact

Inflammation/damage of the eye tissue. Redness of the eye tissue.

Symptoms/injuries after ingestion : May be harmful if swallowed and enters airways. May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. **Toxicity**

Diethyl Ether (60-29-7)	
LC50 fish 1	> 10000 ppm (96 h; Lepomis macrochirus)
EC50 Daphnia 1	165 mg/l (24 h; Daphnia magna)
LC50 fish 2	2560 mg/l (96 h; Pimephales promelas)
EC50 Daphnia 2	1380 mg/l (48 h; Daphnia magna)
TLM fish 1	> 1000 mg/l (96 h; Pisces)
TLM other aquatic organisms 1	> 1000 mg/l (96 h)

Toluene (108-88-3)	
LC50 fish 1	24 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
EC50 Daphnia 1	84 mg/l (24 h; Daphnia magna; Locomotor effect)
LC50 fish 2	13 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 2	11.5 - 19.6 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	> 400 mg/l (168 h; Scenedesmus quadricauda; Toxicity test)
Threshold limit algae 2	105 mg/l (192 h; Microcystis aeruginosa)

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BCF other aquatic organisms 1

Heptane (142-82-5)		
LC50 fish 1	375 mg/l (96 h; Tilapia mosambica; Nominal concentration)	
LC50 other aquatic organisms 1	> 1000 mg/l (96 h)	
EC50 Daphnia 1	1.5 mg/l (48 h; Daphnia magna)	
LC50 fish 2	> 100 mg/l (96 h; Oncorhynchus kisutch)	
TLM fish 1	4924 mg/l (48 h; Gambusia affinis)	
Threshold limit other aquatic organisms 1	> 1000 mg/l (96 h)	
Threshold limit algae 1	> 200 mg/l (Scenedesmus quadricauda; Toxicity test)	
Threshold limit algae 2	1.5 mg/l (8 h; Algae; Photosynthesis)	
Carbon Dioxide, Liquefied, Under Pressure	9 (124-38-9)	
LC50 fish 1	35 mg/l (96 h; Salmo gairdneri (Oncorhynchus mykiss); Lethal)	
LC50 fish 2	60 - 240 mg/l (12 h; Salmo gairdneri (Oncorhynchus mykiss); Lethal)	
2.2. Persistence and degradability		
JOHNSEN'S 20% STARTING FLUID 10.7 O	7 .	
Persistence and degradability	Not established.	
•		
Diethyl Ether (60-29-7)	Not readily histogradable in water No (test) data on mobility of the sylvatores of the	
Persistence and degradability	Not readily biodegradable in water. No (test)data on mobility of the substance available. Reacts with air.	
Biochemical oxygen demand (BOD)	0.03 g O ₂ /g substance	
Chemical oxygen demand (COD)	0.026 g O ₂ /g substance (KMnO4)	
ThOD	2.60 g O ₂ /g substance	
BOD (% of ThOD)	0.012 % ThOD	
,		
Toluene (108-88-3)	Pandily hindagradable in water Diodogradable in the sail Low natential for adsorption in an	
Persistence and degradability Biochemical oxygen demand (BOD)	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in so 2.15 g O_2 /g substance	
Chemical oxygen demand (COD)	2.13 g O ₂ /g substance	
ThOD	3.13 g O ₂ /g substance	
BOD (% of ThOD)	0.69 % ThOD	
,	0.00 /0 11100	
Heptane (142-82-5)		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Adsorbs into the soil.	
Biochemical oxygen demand (BOD)	1.92 g O ₂ /g substance	
Chemical oxygen demand (COD)	0.06 g O ₂ /g substance	
ThOD	3.52 g O ₂ /g substance	
BOD (% of ThOD)	> % ThOD (5 day(s)) > 0.5	
Heptane, Branched Cyclic (426260-76-6)		
Persistence and degradability	May cause long-term adverse effects in the environment.	
Carbon Dioxide, Liquefied, Under Pressure	(124-38-9)	
Persistence and degradability	Biodegradability: not applicable. Not applicable (gas).	
Biochemical oxygen demand (BOD)	Not applicable	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
Petroleum Gases, Liquefied, Sweetened (6)	8476-86-8)	
Persistence and degradability	Not established.	
2.3. Bioaccumulative potential		
· · · · · · · · · · · · · · · · · · ·		
JOHNSEN'S 20% STARTING FLUID 10.7 O	Not established.	
Bioaccumulative potential	INUL ESTABILISTIEU.	
Diethyl Ether (60-29-7)		
BCF fish 1	0.9 - 9.1 (Cyprinus carpio; Test duration: 6 weeks)	
	0.82 - 0.89 (Experimental value)	
Log Pow	, ,	
Log Pow Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
-		
Bioaccumulative potential		
Bioaccumulative potential Toluene (108-88-3)	Low potential for bioaccumulation (BCF < 500).	

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380 (24 h; Chlorella sp.; Fresh weight)

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Toluene (108-88-3)	
BCF other aquatic organisms 2	4.2 (Mytilus edulis; Fresh weight)
Log Pow	2.73 (Experimental value; Other; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
Heptane (142-82-5)	
BCF other aquatic organisms 1	552
Log Pow	4.66 (Experimental value; 4.5; Literature)
Bioaccumulative potential	Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).
Heptane, Branched Cyclic (426260-76-6)	
Bioaccumulative potential	Not established.
Carbon Dioxide, Liquefied, Under Pressure	e (124-38-9)
Log Pow	0.83 (Experimental value)
Bioaccumulative potential	Bioaccumulation: not applicable.
Petroleum Gases, Liquefied, Sweetened (6	8476-86-8)
Bioaccumulative potential	Not established.
12.4. Mobility in soil	
Diethyl Ether (60-29-7)	
Surface tension	0.017 N/m (20 °C)
Toluene (108-88-3)	

Surface tension

Surface tension

Heptane (142-82-5)

12.5. Other adverse effects
Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Container under

pressure. Do not drill or burn even after use. Dispose of contents/container to appropriate waste

disposal facility, in accordance with local, regional, national, international regulations.

Additional information : Flammable vapors may accumulate in the container.

0.03 N/m (20 °C)

0.020 N/m (20 °C)

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT (ground): UN1950, Aerosols, 2.1, Limited Quantity ICAO/IATA (air): UN1950, Aerosols, 2.1, Limited Quantity

IMO/IMDG (water): UN1950, Aerosols, 2.1 (Marine Pollutant-Heptane), Limited Quantity

Special Provisions: N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Aerosols

 $\label{eq:local_problem} \textit{flammable}, \, \textit{n.o.s.} \, \, \textit{(engine starting fluid)} \, \, \textit{(each not exceeding 1 L capacity)}$

Department of Transportation (DOT) Hazard

Classes

: 2.1 - Class 2.1 - Flammable gas 49 CFR 173.115

Hazard labels (DOT) : 2.1 - Flammable gas



DOT Special Provisions (49 CFR 172.102) : N82 - See 173.306 of this subchapter for classification criteria for flammable aerosols.

DOT Packaging Exceptions (49 CFR 173.xxx) : 306
DOT Packaging Non Bulk (49 CFR 173.xxx) : 304
DOT Packaging Bulk (49 CFR 173.xxx) : None

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14.3	Δd	ditions	l inf	ormation

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel

DOT Vessel Stowage Other : 48 - Stow "away from" sources of heat,87 - Stow "separated from" Class 1 (explosives) except

Division 14,126 - Segregation same as for Class 9, miscellaneous hazardous materials

Subsidiary risks (IMDG) : Marine Pollutant-Heptane

Air transport

DOT Quantity Limitations Passenger aircraft/rail : Forbidden

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 150 kg

CFR 175.75)

SECTION 15: Regulatory information

15.1. US Federal regulations

JOHNSEN'S 20% STARTING FLUID 10.7 OZ.	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard
	Immediate (acute) health hazard
	Sudden release of pressure hazard

Diethyl Ether (60-29-7)	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard

Toluene (108-88-3)	
Listed on United States SARA Section 313 Listed on the United States TSCA (Toxic Substar	nces Control Act) inventory
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard

Heptane, Branched Cyclic (426260-76-6)	
Not listed on the United States TSCA (Toxic Subs	stances Control Act) inventory
SARA Section 311/312 Hazard Classes	Fire hazard Immediate (acute) health hazard Delayed (chronic) health hazard

Immediate (acute) health hazard

Distillates (Petroleum), Hydrotreated Heavy Na	aphthenic (64742-52-5)
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard

Petroleum Gases, Liquefied, Sweetened (68476-86-8)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
	Fire hazard
	Sudden release of pressure hazard

15.2. International regulations

CANADA

JOHNSEN'S 20% STARTING FLUID 10.7 OZ.	
WHMIS Classification	Class B Division 5 - Flammable Aerosol
Toluene (108-88-3)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Heptane, Branched Cyclic (426260-76-6)	
WHMIS Classification	Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU-Regulations

Toluene (108-88-3)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

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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]

Carc.Cat.1; R45 Muta.Cat.2; R46 Repr.Cat.3; R63 F+; R12 Xn; R22 Xi; R38

R19

Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

15.3. US State regulations

JOHNSEN'S 20% STARTING FLUID 10.7 OZ.	
State or local regulations	U.S California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

Toluene (108-88-3)

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

ext of H-phrases: see section 16:	
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Compressed gas	Gases under pressure Compressed gas
Flam. Aerosol 1	Flammable aerosol Category 1
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 1	Flammable liquids Category 1
Flam. Liq. 2	Flammable liquids Category 2
Muta. 1B	Germ cell mutagenicity Category 1B
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
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H280	Contains gas under pressure; may explode if heated
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H350	May cause cancer
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt

medical attention is given.

NFPA fire hazard : 4 - Will rapidly or completely vaporize at normal pressure and temperature, or is readily dispersed in air and will burn

readily.

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 : 4 Severe Hazard
Physical : 1 Slight 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.

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SAFETY DATA SHEET	Revision Date: 05/23/2015
	Print Date: 6/3/2015
	SDS Number: R0340954
Pyroil™ STARTING FLUID	Version: 1.0
PYSFR11	

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

: Pyroil™ Trade name

STARTING FLUID

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data **Emergency telephone number** sheet

Ashland

P.O. Box 2219 Columbus, OH 43216

United States of America

EHS Customer Requests@ashland.com

1-800-ASHLAND (1-800-274-5263)

Regulatory Information Number

1-800-325-3751

Product Information

614-790-3333

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable aerosols : Category 1

Carcinogenicity : Category 2

Reproductive toxicity : Category 2

Specific target organ systemic toxicity - single

exposure

: Category 3 (Central nervous system)

Aspiration hazard : Category 1

GHS Label element

Hazard pictograms





Signal Word : Danger

Hazard Statements Extremely flammable aerosol.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness. Suspected of causing cancer.

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	SDS Number: R0340954
Pyroil™ STARTING FLUID	Version: 1.0
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Suspected of damaging fertility or the unborn child.

Precautionary Statements

: 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.

Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Use only outdoors or in a well-ventilated area.

Wear protective gloves/ protective clothing/ eye protection/ face

protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTER or

doctor/ physician.

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

IF exposed or concerned: Get medical advice/ attention.

Do NOT induce vomiting.

Storage:

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

Store locked up.

Protect from sunlight. Do not expose to temperatures exceeding

50 °C/ 122 °F.

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 (%)
SOLVENT NAPHTHA (PETROLEUM), LIGHT	64742-89-8	Flam. Liq. 2; H225	77.53
ÀLIPHATIC "		STOT SE 3; H336	
		Asp. Tox. 1; H304	
		Aquatic Acute 2; H401	
		Aquatic Chronic 2;	

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		H411	
ETHYL ETHER	60-29-7	Flam. Liq. 1; H224	19.55
		Acute Tox. 4; H302	
		STOT SE 3; H336	
n-HEPTANE	142-82-5	Flam. Liq. 2; H225	3.10
		Skin Irrit. 2; H315	
		STOT SE 3; H336	
		Asp. Tox. 1; H304	
CARBON DIOXIDE	124-38-9	Press. Gas Liquefied gas; H280	2.01
ETHANOL	64-17-5	Flam. Liq. 2; H225	1.17
		Eye Irrit. 2A; H319 STOT SE 3; H336	
ETHYL CHLORIDE	75-00-3	Flam. Gas 1; H220	0.29
		Carc. 2; H351	
TOLUENE	108-88-3	Flam. Liq. 2; H225	0.13
		Skin Irrit. 2; H315	
		Eye Irrit. 2A; H319	
		Repr. 2; H361	
		STOT SE 3; H336	
		STOT SE 3; H330	

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Asp. Tox. 1; H304	

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Call a POISON CENTRE or doctor/physician if exposed or

you feel unwell.

Show this safety data sheet to the doctor in attendance. Symptoms of poisoning may appear several hours later.

Do not leave the victim unattended.

If inhaled : Move to fresh air.

If unconscious place in recovery position and seek medical

advice.

Consult a physician after significant exposure.

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 : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

If eye irritation persists, consult a specialist.

If swallowed : Obtain medical attention.

Do NOT induce vomiting.

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

: Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.

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)

Cough

loss of appetite confusion

irregular heartbeat respiratory failure

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May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness. Suspected of causing cancer.

Suspected of damaging fertility or the unborn child.

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

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Never use welding or cutting torch on or near drum (even

empty) because product (even just residue) can ignite

explosively.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion

products

: Aldehydes

carbon dioxide and carbon monoxide

organic compounds Hydrocarbons formaldehyde-like

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. Use a water spray to cool fully closed containers.

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

: Evacuate personnel to safe areas. Remove all sources of ignition.

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Ensure adequate ventilation.

Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

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

: Suppress (knock down) gases/vapours/mists with a water

spray jet.

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).

Other information : Comply with all applicable federal, state, and local regulations.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Open drum carefully as content may be under pressure.

Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty.

Take precautionary measures against static discharges. 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.

Container may be opened only under exhaust ventilation

hood.

Conditions for safe storage

BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or

red-hot objects.

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.

Observe label precautions.

No smoking.

Electrical installations / working materials must comply with

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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
TOLUENE	108-88-3	TWA	20 ppm	ACGIH
		REL	100 ppm 375 mg/m3	NIOSH/GUID E
		STEL	150 ppm 560 mg/m3	NIOSH/GUID E
		TWA	200 ppm	OSHA/Z2
		Ceiling	300 ppm	OSHA/Z2
		MAX. CONC	500 ppm	OSHA/Z2
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	TWA	500 ppm	OSHA_TRA NS
		TWA	300 ppm	ACGIH
		TWA	2,000 mg/m3	OSHA_TRA NS
		TWA	1,370 mg/m3	ACGIH
ETHYL ETHER	60-29-7	TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
		PEL	400 ppm	OSHA_TRA
			1,200 mg/m3	NS
		TWA	400 ppm 1,200 mg/m3	TN OEL
		STEL	500 ppm 1,500 mg/m3	TN OEL
n-HEPTANE	142-82-5	REL	85 ppm 350 mg/m3	NIOSH/GUID E
		Ceil_Time	440 ppm 1,800 mg/m3	NIOSH/GUID E
		PEL	500 ppm 2,000 mg/m3	OSHA_TRA NS
		TWA	400 ppm	ACGIH
		STEL	500 ppm	ACGIH
CARBON DIOXIDE	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		REL	5,000 ppm 9,000 mg/m3	NIOSH/GUID E
		STEL	30,000 ppm 54,000 mg/m3	NIOSH/GUID E
		PEL	5,000 ppm 9,000 mg/m3	OSHA_TRA NS
ETHANOL	64-17-5	REL	1,000 ppm	NIOSH/GUID

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	1		1,900 mg/m3	E
		PEL	1,000 ppm 1,900 mg/m3	OSHA_TRA NS
		STEL	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m3	Z1A
ETHYL CHLORIDE	75-00-3	TWA	100 ppm	ACGIH
		PEL	1,000 ppm 2,600 mg/m3	OSHA_TRA NS
		TWA	1,000 ppm 2,600 mg/m3	Z1A

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Samplin g time	Permissible concentratio n	Basis
TOLUENE	108-88-3	o-Cresol, with hydrolysis	Creatinine in urine	Samplin g time: End of shift.	0.3 mg/g	
Remarks:	Background	d				
		toluene	Urine	Samplin g time: End of shift.	0.03 mg/l	
		toluene	Blood	Samplin g time: Prior to last shift of work week.	0.02 mg/l	

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

Respiratory protection

: In the case of vapour formation use a respirator with an approved filter.

In the case of dust or aerosol formation use respirator with an approved filter.

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

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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

Flame-resistant clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : aerosol

Odour : No data available

Odour Threshold : No data available

pH : No data available

: No data available

Boiling point/boiling range : 94.3 °F / 34.6 °C

(1,013.232 hPa)

Calculated Phase Transition Liquid/Gas

Flash point : -49 °F / -45 °C

Calculated Flash Point

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : 36.5 %(V)

Calculated Explosive Limit

Lower explosion limit : 1.05 %(V)

Calculated Explosive Limit

Vapour pressure : 717.2616 hPa (25 °C)

Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : No data available

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Density : 0.7114 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 : No data available

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

: Vapours may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

excessive heat

Incompatible materials : Acids

Alkali metals Ammonia Bases halogens

inorganic materials Oxidizing agents

sodium

Sulphur compounds

Hazardous decomposition

products Aldehydes

carbon dioxide and carbon monoxide

formaldehyde-like Hydrocarbons organic compounds

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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation

exposure

InhalationSkin contact

Eye Contact Ingestion

Acute toxicity

Not classified based on available information.

Components:

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC: Acute oral toxicity : LD 50 (Rat): > 8,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 3400 ppm

Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD 50 (Rat): > 4,000 mg/kg

ETHYL ETHER:

Acute oral toxicity : LD50 (Rat): 1,200 - 1,700 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 32,000 mg/l

Exposure time: 4 h

n-HEPTANE:

Acute oral toxicity : LD 50 (Rat): Expected > 5,000 mg/kg

Remarks: Information given is based on data obtained from

similar substances.

Acute inhalation toxicity : LC 50 (Rat, male and female): > 29.29 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

Assessment: No adverse effect has been observed in acute

inhalation toxicity tests.

Acute dermal toxicity : LD 50 (Rabbit): Expected > 2,000 mg/kg

Assessment: Not classified as acutely toxic by dermal

absorption under GHS.

Remarks: Information given is based on data obtained from

similar substances.

ETHANOL:

Acute oral toxicity : LD 50 (Rat): 7,060 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 117 - 125 mg/l

Exposure time: 4 h

LC 50 (Mouse): 39 mg/l Exposure time: 4 h

Acute dermal toxicity : LD Lo (Rabbit): 20 g/kg

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ETHYL CHLORIDE:

Acute inhalation toxicity : LC 50 (Rat): > 19000 ppm

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

TOLUENE:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 8000 ppm

Exposure time: 4 h

Acute dermal toxicity : LD 50 (Rabbit): 12,124 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Result: Repeated exposure may cause skin dryness or cracking.

Components:

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Result: Mildly irritating to skin

ETHYL ETHER:

Result: Irritating to skin

n-HEPTANE:

Result: Irritating to skin

CARBON DIOXIDE:

Result: Not irritating to skin

ETHANOL:

Result: Slightly irritating to skin

ETHYL CHLORIDE:

Result: Mildly irritating to skin

TOLUENE:

Result: Irritating to skin

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

Result: Mildly irritating to eyes

ETHYL ETHER:

Result: Severely irritating to eyes

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n-HEPTANE:

Result: Mildly irritating to eyes

CARBON DIOXIDE:

Result: Not irritating to eyes

ETHANOL:

Result: Irritating to eyes

ETHYL CHLORIDE:

Result: Mildly irritating to eyes

TOLUENE:

Result: Irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Components: n-HEPTANE:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Not classified based on available information.

Components: n-HEPTANE:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Test species: rat hepatocytes Method: OECD Test Guideline 473

Result: negative

: Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Carcinogenicity

Suspected of causing cancer.

Components:

ETHYL CHLORIDE:

Carcinogenicity - : Limited evidence of carcinogenicity in animal studies

Assessment

Reproductive toxicity

Suspected of damaging fertility or the unborn child.

Components: TOLUENE:

Reproductive toxicity - : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

STOT - single exposure

May cause drowsiness or dizziness.

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Components:

ETHYL ETHER:

Assessment: May cause drowsiness or dizziness.

n-HEPTANE:

Assessment: May cause drowsiness or dizziness.

ETHANOL:

Assessment: May cause drowsiness or dizziness.

TOLUENE:

Exposure routes: Inhalation

Target Organs: Central nervous system

Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Components:

TOLUENE:

Exposure routes: Inhalation

Target Organs: Neurologic: other (neuropsychological effects, auditory dysfunction and effects

on colour vision)

Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

May be fatal if swallowed and enters airways.

Product:

May be fatal if swallowed and enters airways.

Components:

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC:

May be fatal if swallowed and enters airways.

n-HEPTANE:

May be fatal if swallowed and enters airways.

TOLUENE:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

Components:

ETHYL CHLORIDE: Remarks: Liver

Remarks: Central nervous system

Carcinogenicity:

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

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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

n-HEPTANE:

Toxicity to daphnia and other

aquatic invertebrates

: EC 50 (Water flea (Daphnia magna)): 1.5 mg/l

Exposure time: 48 h Test Type: static test

LC 50 (Mysidopsis bahia (opossum shrimp)): 0.1 mg/l

Exposure time: 96 h
Test Type: semi-static test

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOELR (Water flea (Daphnia magna)): 1 mg/l

Exposure time: 21 d Test Type: static test Test substance: WAF

Method: OECD Test Guideline 211

Remarks: Information given is based on data obtained from

similar substances.

Ecotoxicology Assessment

Acute aquatic toxicity

: Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

ETHANOL:

Toxicity to fish : LC 50 (Rainbow trout, donaldson trout (Oncorhynchus

mykiss)): 12,000 - 16,000 mg/l

Exposure time: 96 h Test Type: static test

Toxicity to daphnia and other

aquatic invertebrates

: EC 50 (Water flea (Daphnia magna)): > 10,000 mg/l

Exposure time: 48 h Test Type: static test

ETHYL CHLORIDE:

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Water flea (Daphnia magna)): 58 mg/l

Exposure time: 48 h Test Type: static test

Method: Directive 67/548/EEC, Annex V, C.2.

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Toxicity to algae : EC50 (Desmodesmus subspicatus (green algae)): 118 mg/l

End point: Growth inhibition

Exposure time: 72 h Test Type: static test

Method: Directive 67/548/EEC, Annex V, C.3.

TOLUENE:

Toxicity to fish : LC50 (Oncorhynchus kisutch (coho salmon)): 5.5 mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Water flea (Ceriodaphnia dubia)): 3.78 mg/l

Exposure time: 48 h Remarks: Mortality

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (microalgae)): > 433

mg/l

End point: Growth inhibition Exposure time: 96 h

NOEC (Scenedesmus quadricauda (Green algae)): > 400

mg/l

End point: Growth inhibition

Exposure time: 7 d

Toxicity to fish (Chronic

toxicity)

: NOEC (Oncorhynchus mykiss (rainbow trout)): 1.39 mg/l

Exposure time: 40 d

Test Type: flow-through test

Toxicity to daphnia and other

aquatic invertebrates (Chronic toxicity)

: NOEC (Water flea (Ceriodaphnia dubia)): 0.74 mg/l

Exposure time: 7 d

Persistence and degradability

n-HEPTANE:

Biodegradability : Result: Readily biodegradable

ETHYL CHLORIDE:

Biodegradability : Inoculum: activated sludge

Result: Not readily biodegradable.

Biodegradation: 0 % Exposure time: 28 d

Method: Directive 67/548/EEC Annex V, C.4.E.

TOLUENE:

Biodegradability : Result: Readily biodegradable

Bioaccumulative potential

ETHYL ETHER:

Partition coefficient: n-

octanol/water

: log Pow: 0.89

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n-HEPTANE:

Partition coefficient: n-

octanol/water

: log Pow: 4.66

ETHANOL:

Partition coefficient: n-

octanol/water

: log Pow: -0.31

ETHYL CHLORIDE:

Partition coefficient: n-

octanol/water

: log Pow: 1.43

TOLUENE:

Bioaccumulation : Species: Ide, silver or golden orfe (Leuciscus idus)

Bioconcentration factor (BCF): 94

Exposure time: 3 d Concentration: 0.05 mg/l Method: Not reported

Partition coefficient: n-

octanol/water

: log Pow: 2.73

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., Toxic to aquatic life with

long lasting effects.

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.

Empty containers should be taken to an approved waste

handling site for recycling or disposal. Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

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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

UN	1950	Aerosols	2	LIMITED QUANTITY

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	1950	Aerosols	2.1	LIMITED QUANTITY

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

UN	1950	Aerosols	2.1	LIMITED
				QUANTITY

INTERNATIONAL MARITIME DANGEROUS GOODS

UN	1950	AEROSOLS	2.1	LIMITED QUANTITY

TRANSPORT CANADA - INLAND WATERWAYS

UN	1950	AEROSOLS	2.1	LIMITED
				QUANTITY

TRANSPORT CANADA - RAIL

UN	1950	AEROSOLS	2.1	LIMITED
				QUANTITY

TRANSPORT CANADA - ROAD

UN	1950	AEROSOLS	2.1	MARINE
				POLLUTANT:(
				ALIPHATIC
				PETROLEUM
				NAPHTHA)LIM
				ITED
				QUANTITY

U.S. DOT - INLAND WATERWAYS

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UN	1950	Aerosols, flammable (engine starting fluid)	2.1

U.S. DOT - RAIL

UN	1950	Aerosols, flammable (engine starting fluid)	2.1

U.S. DOT - ROAD

UN	1950	AEROSOLES	2.1

*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

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
ETHYL ETHER	60-29-7	100	511.380779

SARA 311/312 Hazards : Chronic Health Hazard

Fire Hazard

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

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	70.00 - 90.00 %
ETHYL ETHER	60-29-7	10.00 - 20.00 %
n-HEPTANE	142-82-5	1.00 - 5.00 %
CARBON DIOXIDE	124-38-9	1.00 - 5.00 %
ETHANOL	64-17-5	1.00 - 5.00 %

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New Jersey Right To Know

SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	70.00 - 90.00 %
ETHYL ETHER	60-29-7	10.00 - 20.00 %
n-HEPTANE	142-82-5	1.00 - 5.00 %
CARBON DIOXIDE	124-38-9	1.00 - 5.00 %
ETHANOL	64-17-5	1.00 - 5.00 %
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC	64742-53-6	0.10 - 1.00 %
TOLUENE	108-88-3	0.10 - 1.00 %

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 : On the inventory, or in compliance with the inventory

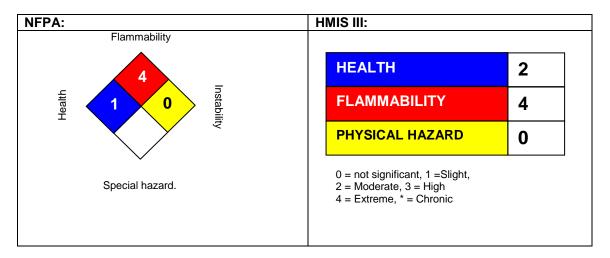
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

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SECTION 16. OTHER INFORMATION

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NFPA Flammable and Combustible Liquids Classification

Not applicable

Full text of H-Statements referred to under sections 2 and 3.

H220	Extremely flammable gas.
H224	Extremely flammable liquid and vapor.
H225	Highly flammable liquid and vapor.
H280	Contains gas under pressure; may explode if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure
	if inhaled.
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 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

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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

RTK: Right to Know

WHMIS: Workplace Hazardous Materials Information System