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| SAFETY DATA SHEET | | Revision Date: 05/22/2015 |
| | | Print Date: 6/2/2015 |
| | | SDS Number: 000000132750 |
| NAPA® MAC'S LOW VOC NON-CHLOR BRAKE PARTS CLEANER | | Version: 1.0 |
| NM4810 | | |

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : NAPA® MAC'S LOW VOC NON-CHLOR BRAKE PARTS CLEANER

Recommended use of the chemical and restrictions on use

| | |
|--|---|
| Details of the supplier of the safety data sheet Ashland P.O. Box 2219 Columbus, OH 43216 United States of America EHS Customer Requests@ashland.com | Emergency telephone number 1-800-ASHLAND (1-800-274-5263) Regulatory Information Number 1-800-325-3751 Product Information 614-790-3333 |
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SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Flammable aerosols : Category 1

Eye irritation : Category 2A

Specific target organ systemic toxicity - single exposure : Category 1 (Central nervous system, Eyes)

Specific target organ systemic toxicity - single exposure : Category 3 (Central nervous system)

Specific target organ systemic toxicity - repeated exposure : Category 2 (Auditory system)

GHS Label element

Hazard pictograms : 

Signal Word : Danger

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Hazard Statements : Extremely flammable aerosol.
 Causes serious eye irritation.
 May cause drowsiness or dizziness.
 Causes damage to organs (Central nervous system, Eyes).
 May cause damage to organs (Auditory system) through prolonged or repeated exposure.

Precautionary Statements : **Prevention:**
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 Do not spray on an open flame or other ignition source.
 Pressurized container: Do not pierce or burn, even after use.
 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
 Wash skin thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Wear eye protection/ face protection.
Response:
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician 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 exposed: Call a POISON CENTER or doctor/ physician. If eye irritation persists: Get medical advice/ attention.
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 : Aspiration hazard
 Chemical nature : Static Accumulator
 Chemical nature : Defatter

Hazardous components

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| Chemical Name | CAS-No. | Classification | Concentration (%) |
|----------------|-----------|---|-------------------|
| ACETONE | 67-64-1 | Flam. Liq. 2; H225 Eye Irrit. 2A; H319 STOT SE 3; H336 | 86.21 |
| CARBON DIOXIDE | 124-38-9 | Press. Gas Liquefied gas; H280 | 5.86 |
| XYLENE | 1330-20-7 | Flam. Liq. 3; H226 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT SE 3; H335, H336 Asp. Tox. 1; H304 | 5.12 |
| METHANOL | 67-56-1 | Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 STOT SE 1; H370 | 2.79 |
| ETHYL BENZENE | 100-41-4 | Flam. Liq. 2; H225 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 STOT RE 2; H373 Asp. Tox. 1; H304 | 1.53 |

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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.
Do not leave the victim unattended.
- If inhaled : Move to fresh air.
Keep patient warm and at rest.
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 : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
- If swallowed : Obtain medical attention.
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 : This material (or a component) has produced hyperglycemia and ketosis following substantial ingestion.
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.
This product contains methanol which can cause intoxication and central nervous system depression. Methanol is metabolized to formic acid and formaldehyde. These metabolites can cause metabolic acidosis, visual disturbances and blindness. Since metabolism is required for these toxic symptoms, their onset may be delayed from 6 to 30 hours following ingestion. Ethanol competes for the same metabolic pathway and has been used to prevent methanol metabolism. Ethanol administration is indicated in symptomatic patients or at blood methanol concentrations above 20 ug/dl. Methanol is effectively removed by hemodialysis.

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Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:

redness of the skin
stomach or intestinal upset (nausea, vomiting, diarrhea)
irritation (nose, throat, airways)
discomfort in the chest
effects on memory
muscle cramps
pain in the abdomen and lower back
Blurred vision
Shortness of breath
confusion
irregular heartbeat
cyanosis (causes blue coloring of the skin and nails from lack of oxygen)
visual impairment (including blindness)
Causes serious eye irritation.
May cause drowsiness or dizziness.
Causes damage to organs.
May cause damage to organs through prolonged or repeated exposure.

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 : carbon dioxide and carbon monoxide
Hydrocarbons
Aldehydes

Specific extinguishing :

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methods

Product is compatible with standard fire-fighting agents.

Further information : 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 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.

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

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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.
 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 |
|----------------|-----------|-------------------------------|--|--------------|
| ACETONE | 67-64-1 | TWA | 500 ppm | ACGIH |
| | | STEL | 750 ppm | ACGIH |
| | | REL | 250 ppm 590 mg/m3 | NIOSH/GUID E |
| | | PEL | 1,000 ppm 2,400 mg/m3 | OSHA_TRANS |
| | | TWA | 250 ppm | ACGIHLIS_P |
| | | STEL | 500 ppm | ACGIHLIS_P |
| | | TWA | 750 ppm 1,800 mg/m3 | Z1A |
| | | STEL | 1,000 ppm 2,400 mg/m3 | Z1A |
| 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_TRANS |
| XYLENE | 1330-20-7 | TWA | 100 ppm | ACGIH |
| | | STEL | 150 ppm | ACGIH |
| | | PEL | 100 ppm 435 mg/m3 | OSHA_TRANS |
| | | REL | 100 ppm 435 mg/m3 | NIOSH/GUID E |
| | | STEL | 150 ppm 655 mg/m3 | NIOSH/GUID E |
| METHANOL | 67-56-1 | TWA | 200 ppm | ACGIH |
| | | STEL | 250 ppm | ACGIH |
| | | REL | 200 ppm 260 mg/m3 | NIOSH/GUID E |

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|---------------|----------|------|----------------------|-------------|
| | | STEL | 250 ppm 325 mg/m3 | NIOSH/GUIDE |
| | | PEL | 200 ppm 260 mg/m3 | OSHA_TRANS |
| | | TWA | 200 ppm 260 mg/m3 | TN OEL |
| | | STEL | 250 ppm 325 mg/m3 | TN OEL |
| ETHYL BENZENE | 100-41-4 | TWA | 20 ppm | ACGIH |
| | | REL | 100 ppm 435 mg/m3 | NIOSH/GUIDE |
| | | STEL | 125 ppm 545 mg/m3 | NIOSH/GUIDE |
| | | PEL | 100 ppm 435 mg/m3 | OSHA_TRANS |

Biological occupational exposure limits

| Components | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|---------------|-------------------------|---|---------------------|---------------------------------|---------------------------|-----------|
| ACETONE | 67-64-1 | acetone | Urine | Sampling time: End of shift. | 50 mg/l | |
| Remarks: | Nonspecific | | | | | |
| XYLENE | 1330-20-7 | Methylhippuric acids | Creatinine in urine | Sampling time: End of shift. | 1.5 g/g | |
| METHANOL | 67-56-1 | methanol | Urine | Sampling time: End of shift. | 15 mg/l | |
| Remarks: | Background, Nonspecific | | | | | |
| ETHYL BENZENE | 100-41-4 | Sum of mandelic acid and phenylglyoxylic acid | Creatinine in urine | Sampling time: End of shift. | 0.15 g/g | ACGIH BEI |
| Remarks: | Nonspecific | | | | | |

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.

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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.

- Hand protection
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.
- Skin and body protection : Wear as appropriate:
impervious clothing
Safety shoes
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
- Melting point/freezing point : No data available
- Boiling point/boiling range : No data available
- Flash point : -4 °F / -20 °C
Value for Component
- Evaporation rate : No data available
- Flammability (solid, gas) :

No data available

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Flammability (liquids) : Static Accumulating liquid

Flammability (liquids) :
Upper explosion limit : 36 %(V)
GLP: Calculated Explosive Limit

Lower explosion limit : 1 %(V)
GLP: Calculated Explosive Limit

Vapour pressure : > 9,999 hPa (21 °C)
Value for Component

Relative vapour density : No data available

Relative density : No data available

Density : 0.756 g/cm³ (21.1 °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

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alkalis
aluminum
Amines
Ammonia
halogens
Lead
peroxides
Reducing agents
sodium
strong bases
Strong oxidizing agents
Zinc
Peroxides

Hazardous decomposition products

carbon dioxide and carbon monoxide
formaldehyde-like
Hydrocarbons

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Components:

ACETONE:

Acute oral toxicity : LD 50 (Rat, female): 5,800 mg/kg

Acute inhalation toxicity : LC 50 (Rat, female): 76 mg/l
Exposure time: 4 h

Acute dermal toxicity : LD 50 (Rabbit): > 7,426 mg/kg

XYLENE:

Acute oral toxicity : LD 50 (Rat): 3,523 - 8,600 mg/kg

Acute inhalation toxicity : LC 50 (Rat): 6700 ppm
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD 50 (Rabbit): 1,700 mg/kg

METHANOL:

Acute oral toxicity : LD L0 (Human): 300 mg/kg
Assessment: The component/mixture is classified as acute oral toxicity, category 3.

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Acute inhalation toxicity : LC 50 (Rat): 64000 ppm
Exposure time: 4 h

Assessment: The component/mixture is classified as acute inhalation toxicity, category 3.
Remarks: Slightly toxic by inhalation

Acute dermal toxicity : LD 50 (Rabbit): 12,800 mg/kg
Assessment: The component/mixture is classified as acute dermal toxicity, category 3.

ETHYL BENZENE:
Acute oral toxicity : LD 50 (Rat): ca. 3,500 mg/kg

Acute inhalation toxicity : LC50 (Rat): 4000 ppm
Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD 50 (Rabbit): 17,800 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Product:

Remarks: May cause skin irritation in susceptible persons.

Result: Repeated exposure may cause skin dryness or cracking.

Components:

ACETONE:

Result: Mildly irritating to skin

Result: Repeated exposure may cause skin dryness or cracking.

CARBON DIOXIDE:

Result: Not irritating to skin

XYLENE:

Result: Irritating to skin

METHANOL:

Species: Rabbit

Result: Not irritating to skin

ETHYL BENZENE:

Result: Irritating to skin

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

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Components:

ACETONE:

Result: Irritating to eyes

CARBON DIOXIDE:

Result: Not irritating to eyes

XYLENE:

Result: Irritating to eyes

METHANOL:

Species: Rabbit

Result: Mildly irritating to eyes

ETHYL BENZENE:

Result: Irritating to eyes

Remarks: Exposure to a concentration of 5000 ppm causes intolerable irritation of the eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Components:

METHANOL:

Test Type: Maximisation Test (GPMT)

Species: Guinea pig

Assessment: Does not cause skin sensitisation.

Method: OECD Test Guideline 406

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause drowsiness or dizziness.

Causes damage to organs (Central nervous system, Eyes).

Components:

ACETONE:

Exposure routes: Inhalation

Target Organs: Nervous system

Assessment: May cause drowsiness or dizziness.

XYLENE:

Assessment: May cause respiratory irritation., May cause drowsiness or dizziness.

METHANOL:

Target Organs: Central nervous system, Eyes

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

STOT - repeated exposure

May cause damage to organs (Auditory system) through prolonged or repeated exposure.

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Components:

ETHYL BENZENE:

Target Organs: Auditory system

Assessment: May cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Components:

ACETONE:

May be harmful if swallowed and enters airways.

XYLENE:

May be fatal if swallowed and enters airways.

ETHYL BENZENE:

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:

METHANOL:

Remarks: Central nervous system

ETHYL BENZENE:

Remarks: Central nervous system

Carcinogenicity:

IARC

Group 2B: Possibly carcinogenic to humans

ETHYL BENZENE

100-41-4

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

ACETONE:

Toxicity to fish : LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss)): 4,740 - 6,330 mg/l
 Exposure time: 96 h
 Test Type: static test

LC 50 (Fathead minnow (Pimephales promelas)): 8,733 - 9,482 mg/l
 Exposure time: 96 h
 Test Type: flow-through test

Toxicity to algae : NOEC (Microcystis aeruginosa): 530 mg/l
 Exposure time: 8 d
 Test Type: static test

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 2,112 mg/l
 Exposure time: 28 d
 Test Type: flow-through test

XYLENE:

Toxicity to fish : LC 50 (Fathead minnow (Pimephales promelas)): 23.53 - 29.97 mg/l
 Exposure time: 96 h
 Test Type: static test

Toxicity to daphnia and other aquatic invertebrates : LC 50 (Water flea (Daphnia magna)): > 100 - < 1,000 mg/l
 Exposure time: 24 h
 Test Type: static test

METHANOL:

Toxicity to fish : LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss)): 18,000 - 20,000 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 BENZENE:

Toxicity to fish : LC 50 (Fathead minnow (Pimephales promelas)): 9.1 - 15.6 mg/l
 Exposure time: 96 h
 Test Type: static test

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LC 50 (Rainbow trout,donaldson trout (Oncorhynchus mykiss)): 4.2 mg/l
 Exposure time: 96 h
 Test Type: Renewal

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): 1.37 - 4.4 mg/l
 Exposure time: 48 h
 Test Type: static test

Toxicity to algae : (Pseudokirchneriella subcapitata (green algae)): 3.6 mg/l
 End point: EC 50
 Exposure time: 96 h
 Test Type: Growth inhibition

Persistence and degradability

Components:

ACETONE:

Biodegradability : Result: Readily biodegradable
 Biodegradation: 90.9 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301B

XYLENE:

Physico-chemical removability : Remarks: The product evaporates readily.

METHANOL:

Biodegradability : Biodegradation: 99 %
 Exposure time: 28 d
 Method: OECD Test Guideline 301D

ETHYL BENZENE:

Biodegradability : Result: Readily biodegradable
 Biodegradation: 70 - 80 %
 Exposure time: 28 d

Bioaccumulative potential

Components:

ACETONE:

Partition coefficient: n-octanol/water : log Pow: -0.24

XYLENE:

Partition coefficient: n-octanol/water : log Pow: 3.16

METHANOL:

Bioaccumulation : Species: Green algae (Chlorella fusca vacuolata)
 Bioconcentration factor (BCF): 28,400

| | | |
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Exposure time: 24 h
Concentration: 0.05 mg/l
Method: Static

Partition coefficient: n-octanol/water : log Pow: -0.77

ETHYL BENZENE:
Partition coefficient: n-octanol/water : log Pow: 3.15

Mobility in soil

Components:
No data available

Other adverse effects
No data available

Product:
Additional ecological information : No data available

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : Do not dispose of waste into sewer.
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. |
|-----------|----------------------|---------------|--------------------|---------------|------------------------------|
| | | | | | |

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U.S. DOT - ROAD

| | | |
|--|------------------------------|-----|
| | ORM-D, CONSUMER COMMODITY | ORM |
| | | |

U.S. DOT - RAIL

| | | |
|--|------------------------------|-----|
| | ORM-D, CONSUMER COMMODITY | ORM |
| | | |

U.S. DOT - INLAND WATERWAYS

| | | |
|--|------------------------------|-----|
| | ORM-D, CONSUMER COMMODITY | ORM |
| | | |

TRANSPORT CANADA - ROAD

| | | | |
|----|------|----------|-----|
| UN | 1950 | AEROSOLS | 2.1 |
| | | | |

TRANSPORT CANADA - RAIL

| | | | |
|----|------|----------|-----|
| UN | 1950 | AEROSOLS | 2.1 |
| | | | |

TRANSPORT CANADA - INLAND WATERWAYS

| | | | |
|----|------|----------|-----|
| UN | 1950 | AEROSOLS | 2.1 |
| | | | |

INTERNATIONAL MARITIME DANGEROUS GOODS

| | | | |
|----|------|----------|-----|
| UN | 1950 | AEROSOLS | 2.1 |
| | | | |

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

| | | | |
|----|------|---------------------|-----|
| UN | 1950 | Aerosols, flammable | 2.1 |
| | | | |

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

| | | | |
|----|------|---------------------|-----|
| UN | 1950 | Aerosols, flammable | 2.1 |
| | | | |

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

| | | | |
|----|------|----------|---|
| UN | 1950 | AEROSOLS | 2 |
| | | | |

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

| | |
|------------------|----|
| Marine pollutant | no |
|------------------|----|

| | | |
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Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|------------|-----------|--------------------|-----------------------------|
| XYLENE | 1330-20-7 | 100 | 1636.205966 |

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

SARA 313 Component(s)

| | | |
|---------------|-----------|--------|
| XYLENE | 1330-20-7 | 5.12 % |
| METHANOL | 67-56-1 | 2.79 % |
| ETHYL BENZENE | 100-41-4 | 1.53 % |

Pennsylvania Right To Know

| | | |
|----------------|-----------|-----------------|
| ACETONE | 67-64-1 | 70.00 - 90.00 % |
| CARBON DIOXIDE | 124-38-9 | 5.00 - 10.00 % |
| XYLENE | 1330-20-7 | 5.00 - 10.00 % |
| METHANOL | 67-56-1 | 1.00 - 5.00 % |
| ETHYL BENZENE | 100-41-4 | 1.00 - 5.00 % |

New Jersey Right To Know

| | | |
|----------------|-----------|-----------------|
| ACETONE | 67-64-1 | 70.00 - 90.00 % |
| CARBON DIOXIDE | 124-38-9 | 5.00 - 10.00 % |
| XYLENE | 1330-20-7 | 5.00 - 10.00 % |
| METHANOL | 67-56-1 | 1.00 - 5.00 % |
| ETHYL BENZENE | 100-41-4 | 1.00 - 5.00 % |

California Prop 65

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

| | | |
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ETHYL BENZENE 100-41-4

BENZENE 71-43-2

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

METHANOL 67-56-1

TOLUENE 108-88-3

BENZENE 71-43-2

The components of this product are reported in the following inventories:

- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL.
- AUSTR : On the inventory, or in compliance with the inventory
- ENCS : On the inventory, or in compliance with the inventory
- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

| | | |
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SECTION 16. OTHER INFORMATION

Further information

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| | | | | | | | |
|---|--|---------------|-----------|---------------------|----------|------------------------|----------|
| NFPA: | HMIS III: | | | | | | |
| <p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p> | <table border="1"> <tr> <td>HEALTH</td> <td>2*</td> </tr> <tr> <td>FLAMMABILITY</td> <td>4</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td>0</td> </tr> </table> <p>0 = not significant, 1 =Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p> | HEALTH | 2* | FLAMMABILITY | 4 | PHYSICAL HAZARD | 0 |
| HEALTH | 2* | | | | | | |
| FLAMMABILITY | 4 | | | | | | |
| PHYSICAL HAZARD | 0 | | | | | | |

NFPA Flammable and Combustible Liquids Classification

Not applicable Not applicable

Full text of H-Statements referred to under sections 2 and 3.

- H225 Highly flammable liquid and vapor.
- H226 Flammable liquid and vapor.
- H280 Contains gas under pressure; may explode if heated.
- H301 Toxic if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H311 Toxic in contact with skin.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H370 Causes damage to organs.
- H373 May cause damage to organs through prolonged or repeated exposure.

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