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<b>SAFETY DATA SHEET</b>		Revision Date: 05/23/2015
		Print Date: 5/28/2015
		SDS Number: R0328421
Valvoline™ LOW VOC NON-CHLORINATED BRAKE PARTS CLEANER		Version: 1.0
602371		

29 CFR 1910.1200 (OSHA HazCom 2012)

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### Product identifier

Trade name : Valvoline™ LOW VOC NON-CHLORINATED  
BRAKE PARTS CLEANER

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

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

### GHS Classification

Flammable aerosols : Category 1

Acute toxicity (Oral) : Category 4

Acute toxicity (Inhalation) : Category 4

Acute toxicity (Dermal) : Category 4

Skin irritation : Category 2

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 (Respiratory system, Central nervous system)

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

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Aspiration hazard : Category 1

**GHS Label element**

Hazard pictograms :



Signal Word : Danger

Hazard Statements : Extremely flammable aerosol.  
Harmful if swallowed, in contact with skin or if inhaled.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory 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.  
Wear protective gloves/ protective clothing.  
**Response:**  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.  
IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.  
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.  
Do NOT induce vomiting.  
If skin irritation occurs: Get medical advice/ attention.  
If eye irritation persists: Get medical advice/ attention.  
Take off contaminated clothing and wash before reuse.  
**Storage:**  
Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.  
Protect from sunlight. Do not expose to temperatures exceeding

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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 : Static Accumulator
- Chemical nature : Defatter

**Hazardous components**

Chemical Name	CAS-No.	Classification	Concentration (%)
ACETONE	67-64-1	Flam. Liq. 2; H225 Eye Irrit. 2A; H319 STOT SE 3; H336	51.80
METHANOL	67-56-1	Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 STOT SE 1; H370	22.07
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	20.12

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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	6.03
CARBON DIOXIDE	124-38-9	Press. Gas Liquefied gas; H280	6.00

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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.  
Symptoms of poisoning may appear several hours later.  
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 induce vomiting.  
Rinse mouth with water.

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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. 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. 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:  
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)  
Harmful if swallowed, in contact with skin or if inhaled  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory 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.

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## SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Water spray  
Foam  
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 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

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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 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 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	NIOSH/GUID

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			590 mg/m3	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
METHANOL	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		REL	200 ppm 260 mg/m3	NIOSH/GUIDE
		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
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/GUIDE
		STEL	150 ppm 655 mg/m3	NIOSH/GUIDE
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
CARBON DIOXIDE	124-38-9	TWA	5,000 ppm	ACGIH
		STEL	30,000 ppm	ACGIH
		REL	5,000 ppm 9,000 mg/m3	NIOSH/GUIDE
		STEL	30,000 ppm 54,000 mg/m3	NIOSH/GUIDE
		PEL	5,000 ppm 9,000 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:	50 mg/l	



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				End of shift.		
Remarks:	Nonspecific					
METHANOL	67-56-1	methanol	Urine	Sampling time: End of shift.	15 mg/l	
Remarks:	Background, Nonspecific					
XYLENE	1330-20-7	Methylhippuric acids	Creatinine in urine	Sampling time: End of shift.	1.5 g/g	
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.

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

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Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
Discard gloves that show tears, pinholes, or signs of wear.  
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : Wash hands before breaks and at the end of workday.  
When using do not eat or drink.  
When using do not smoke.

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## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : aerosol

Odour : No data available

Odour Threshold : No data available

pH : No data available

: No data available

Boiling point/boiling range : 133 °F / 56 °C  
(1,013.232 hPa)  
Calculated Phase Transition Liquid/Gas

Flash point : -4 °F / -20 °C

Evaporation rate : No data available

Flammability (solid, gas) :  
  
No data available  
  
No data available

Flammability (liquids) : Static Accumulating liquid

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

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

Vapour pressure : 307.9692 hPa (25 °C)  
Calculated Vapor Pressure

Relative vapour density : No data available

Relative density : No data available

Density : 0.8132 g/cm<sup>3</sup> (15.56 °C)

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Solubility(ies)  
 Water solubility : No data available  
 Solubility in other solvents : No data available  
 Partition coefficient: n-octanol/water : No data available  
 Thermal decomposition : No data available  
 Viscosity  
 Viscosity, dynamic : No data available  
 Viscosity, kinematic : No data available  
 Oxidizing properties : No data available  
 Heat of combustion : Estimated 30.0 kJ/g

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## SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.  
 Chemical stability : Stable under recommended storage conditions.  
 Possibility of hazardous reactions : Vapours may form explosive mixture with air.  
 Conditions to avoid : Heat, flames and sparks.  
 excessive heat  
 Incompatible materials : Acids  
 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

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Hydrocarbons

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**SECTION 11. TOXICOLOGICAL INFORMATION**

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

**Acute toxicity**

Harmful if swallowed, in contact with skin or if inhaled

**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

**METHANOL:**

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

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.

**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

**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

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

**Skin corrosion/irritation**

Causes skin irritation.

**Product:**

Remarks: May cause skin irritation and/or dermatitis.

Result: Repeated exposure may cause skin dryness or cracking.

**Components:**

ACETONE:

Result: Mildly irritating to skin

Result: Repeated exposure may cause skin dryness or cracking.

METHANOL:

Species: Rabbit

Result: Not irritating to skin

XYLENE:

Result: Irritating to skin

ETHYL BENZENE:

Result: Irritating to skin

CARBON DIOXIDE:

Result: Not irritating to skin

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Product:**

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

**Components:**

ACETONE:

Result: Irritating to eyes

METHANOL:

Species: Rabbit

Result: Mildly irritating to eyes

XYLENE:

Result: Irritating to eyes

ETHYL BENZENE:

Result: Irritating to eyes

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

CARBON DIOXIDE:

Result: Not irritating to eyes

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**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 respiratory irritation.

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.

METHANOL:

Target Organs: Central nervous system, Eyes

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

XYLENE:

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

**STOT - repeated exposure**

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

**Components:**

ETHYL BENZENE:

Target Organs: Auditory system

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:**

ACETONE:

May be harmful if swallowed and enters airways.

XYLENE:

May be fatal if swallowed and enters airways.

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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

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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

**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

**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

**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

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



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**METHANOL:**

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

**XYLENE:**

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

**ETHYL BENZENE:**

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

**Bioaccumulative potential**

**Components:**

**ACETONE:**

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

**METHANOL:**

Bioaccumulation : Species: Green algae (*Chlorella fusca vacuolata*)  
Bioconcentration factor (BCF): 28,400  
Exposure time: 24 h  
Concentration: 0.05 mg/l  
Method: Static

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

**XYLENE:**

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

**ETHYL BENZENE:**

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

**Mobility in soil**

**Components:**

No data available

**Other adverse effects**

No data available

**Product:**

Additional ecological : An environmental hazard cannot be excluded in the event of  
information : unprofessional handling or disposal., Harmful to aquatic life.

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**Components:**

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

General advice : The product should not be allowed to enter drains, water courses or the soil.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.  
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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**MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES**

UN	1950	ORM-D, CONSUMER COMMODITY	2		
----	------	---------------------------	---	--	--

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER**

UN	1950	ORM-D, CONSUMER COMMODITY	2.1		
----	------	---------------------------	-----	--	--

**INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO**

UN	1950	ORM-D, CONSUMER COMMODITY	2.1		
----	------	---------------------------	-----	--	--

**INTERNATIONAL MARITIME DANGEROUS GOODS**

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

**TRANSPORT CANADA - INLAND WATERWAYS**

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

**TRANSPORT CANADA - RAIL**

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

**TRANSPORT CANADA - ROAD**

UN	1950	AEROSOLS	2.1	LIMITED QUANTITY
----	------	----------	-----	---------------------

**U.S. DOT - INLAND WATERWAYS**

	Aerosols, flammable	ORM
--	---------------------	-----

**U.S. DOT - RAIL**

	Aerosols, flammable	ORM
--	---------------------	-----

**U.S. DOT - ROAD**

	AEROSOLS	ORM
--	----------	-----

\*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	496.985781

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

**SARA 313 Component(s)**  
METHANOL 67-56-1 22.07 %

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XYLENE	1330-20-7	20.12 %
ETHYL BENZENE	100-41-4	6.03 %

**Pennsylvania Right To Know**

ACETONE	67-64-1	50.00 - 70.00 %
METHANOL	67-56-1	20.00 - 30.00 %
XYLENE	1330-20-7	20.00 - 30.00 %
ETHYL BENZENE	100-41-4	5.00 - 10.00 %
CARBON DIOXIDE	124-38-9	5.00 - 10.00 %

**New Jersey Right To Know**

ACETONE	67-64-1	50.00 - 70.00 %
METHANOL	67-56-1	20.00 - 30.00 %
XYLENE	1330-20-7	20.00 - 30.00 %
ETHYL BENZENE	100-41-4	5.00 - 10.00 %
CARBON DIOXIDE	124-38-9	5.00 - 10.00 %

**California Prop 65**

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

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

NZIOC : On the inventory, or in compliance with the inventory

ENCS : On the inventory, or in compliance with the inventory

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- KECL : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory

**Inventories**

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

**SECTION 16. OTHER INFORMATION**

**Further information**

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

**NFPA Flammable and Combustible Liquids Classification**

Not applicable

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

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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 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

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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