



## SAFETY DATA SHEET

### NAPA DOT 3 BRAKE FLUID

#### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Issue Date: March 5, 2014

Revised: April 2, 2015

**Product Name:** NAPA DUTY DOT 3 BRAKE FLUID

**Synonyms:** Brake Fluid

**CAS Number:** Mixture, see Section 3

**Chemical Formula:** Mixture

**General Use:** Brake Fluid

**Manufacturer:** Warren Unilube, Inc., 915 E. Jefferson, West Memphis, AR 72301

**24-HOUR EMERGENCY NUMBER – CHEMTREC:** 1-800-424-9300

**WARREN UNILUBE PHONE:** (800) 428-9284

**FAX:** (870) 400-3070

#### Restrictions on Use:

**FOR LABELS FOR THE GENERAL PUBLIC:** If medical advice is needed, have product container or label at hand.

Keep out of reach of children and animals.

Read label before use.

**FOR THE INDUSTRIAL WORKER:** Industrial use only.

#### SECTION 2: HAZARD(S) IDENTIFICATION

##### Hazard Classification:

**OSHA Hazards:** Target Organ Effect, Harmful by ingestion, Irritant, Teratogen, Reproductive hazard

**Target Organs:** Kidney, Liver, Central nervous system, Female reproductive system, Male reproductive system, Blood.

**GHS Classification:**

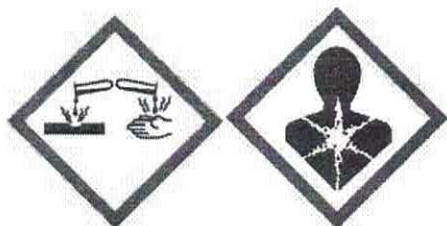
Acute toxicity, dermal (Category 5)

Acute toxicity, oral (Category 4)

Skin Irritation (Category 3)

Serious eye damage (Category 1)

Reproductive toxicity (Category 2)

**Signal Word: WARNING****Hazard Statements:**

H302	Harmful if swallowed
H313	May be harmful in contact with skin
H316	Causes mild skin irritation
H318	Causes serious eye damage
H361	Suspected of damaging fertility or the unborn child

**Precautionary Statements:**

P201	Obtain special instructions before use.
P202	Do not handle until all safety instructions have been read and Understood.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear eye protection / face protection.
P301 +P312	IF SWALLOWED: Call a POISON CENTER or doctor / physician immediately.
P330	IF SWALLOWED: Rinse mouth.
P312	IF ON SKIN: Call a POISON CENTER or doctor / physician if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advise / attention.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310	IF IN EYES: Immediately call a POISON CENTER or doctor / physician.
P308 + P313	If exposed or concerned: Get medical advice / attention.

20-80% of the mixture consists of ingredients of unknown acute toxicity.

**HMIS Classification**

Health hazard:	1
Chronic Health Hazard	
Flammability	1
Physical hazards	0

**NFPA Rating**

Health hazard:	1
Fire:	1
Reactivity	0

**Description of Any Other Hazards Not Otherwise Classified:** none known.

<b>SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS</b>
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<u>INGREDIENT Name:</u>	<u>CAS NUMBER</u>	<u>%wt. or %V</u>
Triethylene Glycol Monomethyl Ether	112-35-6	5-50
Triethylene Glycol Monoethyl Ether	112-50-5	5-50
Triethylene Glycol Monobutyl Ether	143-22-6	5-50
Tetrathylene Glycol Monobutyl Ether	1559-34-8	5-20
Polyethylene Glycol	25322-68-3	5-20
Diethylene Glycol Monobutyl Ether	112-34-5	5-20
Diethylene Glycol	111-46-6	5-15
Diethylene Glycol Monomethyl Ether	111-77-3	<5
Diethylene Glycol Monoethyl Ether	111-90-0	<5
Polyalkylene Glycol Monobutyl Ether	9004-77-7	5-20
Polyalkylene Glycol Monomethyl Ether	23783-42-8	5-20
Polyalkylene Glycols	9038-95-3	5-20
Trade Secret Inhibitor Package	Trade Secret	3

**3% of the composition of this material has been withheld as a trade secret.**

<b>SECTION 4: FIRST AID MEASURE</b>
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**EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation continues or persists, get medical advice / attention.

**SKIN:** Wash with plenty of soap and water. If skin irritation occurs, get medical advice / attention.

**INGESTION:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**INHALATION:** Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.



**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** Treatment should be directed at the control of symptoms and the clinical condition of the patient.

#### **SECTION 5: FIRE-FIGHTING MEASURES**

**SUITABLE EXTINGUISHING MEDIA:** Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool, dilute spills to nonflammable mixtures, protect personnel attempting to stop leak, and disperse vapors.

**UNSUITABLE EXTINGUISHING MEDIA:** Direct water stream.

**SPECIAL FIRE FIGHTING PROCEDURES:** Evacuate area. Do not use direct water stream to extinguish fires. Do not release runoff from fire control methods to sewers or waterways.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None known.

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, and unidentified organic compounds.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE FIGHTERS:** Wear full protective clothing and NIOSH – approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive breathing mode.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**PERSONAL PRECAUTIONS:** Use appropriate personal protective equipment. Avoid breathing vapors, mist or gas. Avoid contact with spilled material. Insure adequate ventilation. Remove all sources of ignition. Use non-sparking tools and equipment.

**PROTECTIVE CLOTHING:** Standard work uniform. Impervious gloves. Safety glasses. Personnel should increase PPE level as deemed appropriate in any given situation.

#### **EMERGENCY PROCEDURES:**

**SMALL SPILLS:** Contain and recover liquid when possible. Collect liquid in appropriate container or absorb with an inert material (such as vermiculite or dry sand) and place in chemical waste container. Do not use combustible materials such as sawdust for the cleanup.

#### **LARGE SPILLS:**

**Containment:** Shut off source of leak if safe to do so. Dike far ahead of liquid spill for later disposal. Do not allow material to enter sewers or waterways.

**Cleanup:** Contain and recover liquid when possible. Collect liquid in appropriate container. Absorb residue with an inert material (such as vermiculite or dry sand) and place in chemical waster container. Do not use combustible materials such as sawdust for the cleanup.

**SECTION 7: HANDLING AND STORAGE****HANDLING PRECAUTIONS:** May be harmful or fatal if swallowed.**STORAGE REQUIREMENTS:** Store in a cool dry, ventilated area.**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION****ENGINEERING CONTROLS:** Controls should be such that adequate ventilation is provided.**VENTILATION:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work place by controlling it at its source.**RESPIRATORY PROTECTION:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA / NIOSH approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (e.g. cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.**EYE PROTECTION:** Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.**SKIN PROTECTION:** Wear chemically protective gloves, boots, aprons and gauntlets to prevent prolonged or repeated skin contact.**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** Make emergency eyewash stations, safety / quick drench showers and washing facilities available in work areas.**WORK HYGIENIC PRACTICES:** Never eat, drink or smoke in work areas. Practice good personal hygiene after using this material especially before eating, drinking or smoking, using the toilet, or applying cosmetics. Separate contaminate work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. Discard belts and shoes that cannot be cleaned.**EXPOSURE GUIDELINES:**

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		USA WEEL
	TWA	STEL	TWA	STEL	TWA	STEL	
Triethylene Glycol Monomethyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.



Triethylene Glycol Monoethyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Triethylene Glycol Monobutyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Tetraethylene Glycol Monobutyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Polyethylene Glycol	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	10 mg/m3
Diethylene Glycol Monobutyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Diethylene Glycol	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	10 mg/m3
Diethylene Glycol Monomethyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	25 ppm
Diethylene Glycol Monoethyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Diethylene Glycol Monobutyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Polyalkylene Glycol Monobutyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Polyalkylene Glycol Monomethyl Ether	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Polyalkylene Glycols	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Inhibitor Package	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**APPEARANCE AND COLOR:** Yellow to amber

**ODOR:** Mild

**FLASH POINT:** >275°F (>135°C)

**UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:** not available

**AUTO IGNITION TEMPERATURE:** not available

**DECOMPOSITION TEMPERATURE:** not available

**VAPOR PRESSURE:** not available

**ODOR THRESHOLD:** not available

**VAPOR DENSITY (air = 1):** >1

**pH:** 10.0 – 11.5

**RELATIVE DENSITY:** 8.33 – 9.02 lb/gal

**SPECIFIC GRAVITY (H<sub>2</sub>O = 1 AT 4 C):** 1.000 – 1.070

**MELTING POINT / FREEZING POINT:** not available

**WATER SOLUBILITY:** soluble

**OTHER SOLUBILITIES:** not available

**INITIAL BOILING POINT AND BOILING RANGE:** 480°F (248.9°C), boiling range not available

**EVAPORATION RATE (BuAc = 1):** <0.01

**PARTITION COEFFICIENT: n-OCTANOL/WATER:** not available

**VISCOSITY:** not available

**REFRACTIVE INDEX:** not available

**FORMULA WEIGHT:** mixture

## SECTION 10: STABILITY AND REACTIVITY

**REACTIVITY:** none under normal handling.

**STABILITY:** stable at room temperature in closed containers under normal storage and handling conditions.

**CONDITIONS TO AVOID (STABILITY):** none known.

**INCOMPATIBILITY (MATERIAL TO AVOID):** none known.

**HAZARDOUS DECOMPOSITION BY-PRODUCTS:** Thermal oxidative decomposition can produce carbon monoxide, carbon dioxide and unknown organic compounds.

**HAZARDOUS POLYMERIZATION:** Hazardous polymerization will not occur.

**CONDITIONS TO AVOID (POLYMERIZATION):** Hazardous polymerization will not occur.

**HAZARDOUS POLYMERICATION BY-PRODUCTS:** Hazardous polymerization will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

**SIGNS AND SYMPTOMS OF OVEREXPOSURE:** Swallowing larger amounts may cause nausea and vomiting, abdominal discomfort or diarrhea. May cause dizziness and drowsiness.

### ACUTE EFFECTS:

**EYE CONTACT:** May cause slight eye irritation. May cause slight corneal injury.

**SKIN CONTACT:** Brief contact is essentially nonirritating to skin.

**INHALATION:** At room temperature, exposure to vapor is minimal due to low volatility. Mist may cause irritation of the upper respiratory tract.

**INGESTION:** Toxic or fatal if ingested. For diethylene glycol, a component of this mixture, a lethal dose can be as little as two ounces. Symptoms of diethylene glycol poisoning include severe abdominal cramping, diarrhea, vomiting, sweating, confusion, cardiac abnormalities, neurological abnormalities, infrequent urination, intoxication or CNS depression. If left untreated, product will metabolize to cause metabolic acidosis, renal failure, hyperkalemia, hyponatremia, paralysis, cardiac failure or death. Seek medical attention immediately for poisoning. If ingested, DO NOT wait for symptoms to develop before getting treatment.

**TARGET ORGAN EFFECTS:** Product is toxic to kidneys, liver, central nervous system and heart. Metabolic products of diethylene glycol produce acidosis and organ toxicity effects.

**CHRONIC EFFECTS:** May cause dryness or defatting of the skin, dermatitis, or may aggravate existing skin conditions.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Various skin conditions.

#### **ACUTE TOXICITY VALUES**

##### **Triethylene Glycol Monomethyl Ether**

**ORAL LD50 (rat):** 11,842 mg/kg

**DERMAL LD50 (rabbit):** 7,441 mg/kg

**INHALATION LC50 (state animal):** data unavailable

##### **Triethylene Glycol Monoethyl Ether**

**ORAL LD50 (state animal):** data unavailable

**DERMAL LD50 (state animal):** data unavailable

**INHALATION LC50 (state animal):** data unavailable

##### **Tetraethylene Glycol Monobutyl Ether**

**ORAL LD50 (rat):** 5,300 mg/kg

**DERMAL LD50 (rabbit):** 3,505 mg/kg

**INHALATION LC50 (state animal):** data unavailable

##### **Polyethylene Glycol**

**ORAL LD50 (state animal):** data unavailable

**DERMAL LD50 (state animal):** data unavailable

**INHALATION LC50 (state animal):** data unavailable

##### **Diethylene Glycol Monobutyl Ether**

**ORAL LD50 (rat):** 5,660 mg/kg

**DERMAL LD50 (rabbit):** 2,700 mg/kg

**INHALATION LC50 (state animal):** data unavailable

##### **Diethylene Glycol**

**ORAL LD50 (rat):** 12,565 mg/kg

**DERMAL LD50 (rabbit):** 11,890 mg/kg

**INHALATION LC50 (state animal):** data unavailable



**Diethylene Glycol Monomethyl Ether**

**ORAL LD50 (rat):** >7,000 mg/kg  
**DERMAL LD50 (rabbit):** >20,400 mg/kg  
**INHALATION LC50 (state animal):** data unavailable

**Diethylene Glycol Monoethyl Ether**

**ORAL LD50 (rat):** 10,502 mg/kg  
**DERMAL LD50 (rabbit):** 9,143 mg/kg  
**INHALATION LC50 (state animal):** data unavailable

**Polyalkylene Glycol Monobutyl Ether**

**ORAL LD50 (rat):** >2,000 mg/kg  
**DERMAL LD50 (rat):** >2,000 mg/kg  
**INHALATION LC50 (state animal):** data unavailable

**Polyalkylene Glycol Monomethyl Ether**

**ORAL LD50 (state animal):** data unavailable  
**DERMAL LD50 (state animal):** data unavailable  
**INHALATION LC50 (state animal):** data unavailable

**Polyalkylene Glycols**

**ORAL LD50 (state animal):** data unavailable  
**DERMAL LD50 (state animal):** data unavailable  
**INHALATION LC50 (state animal):** data unavailable

**LISTED CARCINOGEN:**

**NATIONAL TOXICOLOGY PROGRAM REPORT ON CARCINOGENS:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**IARC LISTED AS POTENTIAL CARCINOGEN:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

**SECTION 12: ECOLOGICAL INFORMATION**

**DATA FROM TOXICITY TESTS ON AQUATIC AND/OR TERRESTRIAL ORGANISMS:**

**Triethylene Glycol Monoethyl Ether:** data unavailable  
**Triethylene Glycol Monobutyl Ether:** data unavailable

**Tetraethylene Glycol Monobutyl Ether:** data unavailable

**Polyethylene Glycol**

Fish: LC50 – Leuciscus idus (Golden orfe) <500 mg/l

Daphnia: data unavailable

**Diethylene Glycol Monobutyl Ether**

Fish: LC50 – Lepomis macrochirus – 1,300 mg/l – 96h

LC50 – Leuciscus idus (Golden orfe) – >1,000 mg/l – 48h

Daphnia: data unavailable

**Diethylene Glycol**

Fish: LC50 – Pimephales promelas (fathead minnow) – 75,200 mg/l – 96h

LC50 – Carassius auratus (goldfish) – 5,000 mg/l – 24h

Daphnia: EC50 – Daphnia magna (Water flea) - >10,000 mg/l – 24h

**Diethylene Glycol Monomethyl Ether**

Fish: LC50 – Lepomis macrochirus – 7,500 mg/l – 96h

Daphnia: data unavailable

**Diethylene Glycol Monoethyl Ether**

Fish: LC50 – Pimephales promelas (fathead minnow) – 9,650 mg/l – 96h

Daphnia: EC50 – Daphnia magna (Water flea) - >3,340 mg/l – 24h

**Polyalkylene Glycol Monobutyl Ether:** data unavailable

**Polyalkylene Glycol Monomethyl Ether:** data unavailable

**Polyalkylene Glycols:** data unavailable

**ENVIRONMENTAL FATE:** data unavailable for mixture

**BIOACCUMULATION POTENTIAL:** data unavailable for mixture

**POTENTIAL TO MOVE FROM SOIL TO GROUNDWATER:** data unavailable for mixture

**OTHER ADVERS ENVIRONMENTAL EFFECTS:** data unavailable for mixture

**SECTION 13: DISPOSAL CONSIDERATIONS**

**CONTAINERS TO USE:** No specific recommendations

**RECOMMENDED DISPOSAL METHODS:** Whatever cannot be saved for recovery or recycling should be disposed of in an approved waste facility in accordance with Federal, State/Provincial and Local requirements.

**PHYSICAL AND CHEMICAL PROPERTIES THAT MAY AFFECT DISPOSAL ACTIVITIES:**  
No specific information available.

**WHENEVER POSSIBLE, MATERIAL SHOULD NOT BE ALLOWED TO ENTER SEWAGE DISPOSAL SYSTEMS.**

**SPECIAL PRECAUTIONS FOR LANDFILL OR INCINERATION ACTIVITIES:** No specific information available.

**SECTION 14: TRANSPORT INFORMATION**

**U.S. DEPARTMENT OF TRANSPORTATION (49 CFR 172.101)**

**PROPER SHIPPING NAME:** DOT 3 Brake Fluid  
DOT Non-Bulk: Not Regulated  
DOT Bulk: Not Regulated

**IATA**

Not Dangerous Goods

**IMDG**

Not Dangerous Goods

**SECTION 15: REGULATORY INFORMATION**

**U.S. FEDERAL REGULATIONS**

**TSCA (TOXIC SUBSTANCE CONTROL ACT):** all components are listed on the TSCA Inventory

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** None. However, this product contains various ethylene glycols and glycol ethers which are each included as a broad category on the CERCLA Hazardous Substances list.

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**311/312 HAZARD CATEGORIES:**

- Immediate Hazard:** yes / no
- Delayed Hazard:** yes / no
- Fire Hazard:** yes / no
- Pressure Hazard:** yes / no
- Reactivity Hazard:** yes / no

**313 REPORTABLE INGREDIENTS:** The following components are subject to reporting levels established by SARA Title III, Section 313:

2-(2-Ethoxyethoxy) ethanol	CAS Number: 111-90-0
2-(2-methoxyethoxy) ethanol	CAS Number: 111-77-3
2-(2-Butoxyethoxy) ethanol	CAS Number: 112-34-5



**CLEAN WATER ACT (CWA):** None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**CLEAN AIR ACT (CAA):** None of the chemicals in the product are listed as Hazardous Air Pollutants.

**STATE REGULATIONS:**

**California:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Massachusetts:**

2-(2-Methoxyethoxy) ethanol CAS Number: 111-77-3

**New Jersey:**

Triethylene glycol monobutyl ether CAS Number: 143-22-6  
Polyethylene glycol CAS Number: 25322-68-3  
2-(2-Butoxyethoxy) ethanol CAS Number: 112-34-5  
Diethylene glycol CAS Number: 111-46-6  
2-(2-Methoxyethoxy) ethanol CAS Number: 111-77-3  
2-(2-Ethoxyethoxy) ethanol CAS Number: 111-90-0

**Pennsylvania:**

Triethylene glycol monobutyl ether CAS Number: 143-22-6  
Polyethylene glycol CAS Number: 25322-68-3  
2-(2-Butoxyethoxy) ethanol CAS Number: 112-34-5  
Diethylene glycol CAS Number: 111-46-6  
2-(2-Methoxyethoxy) ethanol CAS Number: 111-77-3  
2-(2-Ethoxyethoxy) ethanol CAS Number: 111-90-0

**INTERNAL REGULATIONS:**

**Persistent Organic Pollutants (United Nations):** not listed  
**Initial List of Prior Informed Consent Chemicals (United Nations):** not listed  
**Ozone Depleting Substances (Montreal Protocol):** not listed  
**Greenhouse Gases (Intergovernmental Panel on Climate Change):** not listed

**AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES:** All components are listed.

**CANADA: DOMESTIC SUBSTANCES LIST:** All components are listed.

**CANADA WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS):**  
D2B - Toxic Material at >1%.

**CANADIAN ENVIRONMENTAL PROTECTION AGENCY TOXICS LIST:** None of the components of this mixture are listed.