



Shell Canada Limited

Material Safety Data Sheet

Effective Date: 2002-11-19
Supersedes: 2002-10-04



Class D2B Other
Toxic Effects - Eye
Irritant

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: **DROMUS* B**
SYNONYMS: EMULSIFIABLE CUTTING OIL AND COOLANT
 In use, this oil is mixed with water. This combination has the potential to encourage the growth of bacteria, which may cause health effects. Use of a biocide in the fluid or monitoring of the working fluid on a regular basis is recommended to avoid the possibility of exposure to bacterial contamination.

PRODUCT USE: Metalworking Oil
MSDS Number: 407-776

MANUFACTURER	TELEPHONE NUMBERS	
Shell Canada Limited	Shell Emergency Number	1-800-661-7378
P.O. Box 100, Station M	CANUTEC 24 HOUR EMERGENCY NUMBER	613-996-6666
400-4th Ave. S.W.		
Calgary, AB Canada	For general information:	1-800-661-1600
T2P 2H5	For MSDS information:	403-691-3982
	(From 7:30 to 4:30 Mountain Time)	403-691-2220

This MSDS was prepared by the Toxicology and Product Stewardship Section of Shell Canada Limited.

*An asterisk in the product name designates a trade-mark(s) of Shell Canada Limited, used under license by Shell Canada Products.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS Number	% Range	WHMIS Controlled
Sodium Petroleum Sulfonate	68608-26-4	1 - 5	Yes
9-Octadecenamide,N,N-Bis(2-Hydroxyethyl	93-83-4	1 - 5	Yes
Ethanol, 2-(2-butoxyethoxy)-	112-34-5	1 - 5	Yes

See Section 8 for Occupational Exposure Guidelines.

3. HAZARDS IDENTIFICATION

Physical Description: Liquid Light Brown Slight Odour

Routes of Exposure: Exposure may occur via inhalation, ingestion, skin absorption and skin or eye contact.

Hazards:

Irritating to eyes.
Spilled material is slippery.
Ingestion will cause nausea, vomiting, diarrhea.
Product may be slightly irritating to skin.
Inhalation of oil mist or vapours from hot oil may cause irritation of the upper respiratory tract.

Handling:

Wear suitable gloves and eye protection.
Wear protective clothing.
Wash thoroughly after handling.
DO NOT ALLOW TO FREEZE.

For further information on health effects, see Section 11.

4. FIRST AID

Eyes: Flush eyes with water for at least 15 minutes while holding eyelids open. If irritation occurs and persists, obtain medical attention.

Skin: Wipe excess from skin. Wash contaminated skin with mild soap and water for 15 minutes.

Ingestion: Do not induce vomiting. Obtain medical attention immediately.

Inhalation: Not ordinarily required. If mists, vapours or fumes are present, remove the person from further exposure and restore breathing if necessary.

Notes to Physician: In general, lubricating oils have low oral toxicity. High pressure injection under the skin may have serious consequences and may require urgent treatment.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Dry Chemical
Carbon Dioxide
Foam
Water Spray

Firefighting Instructions: Material will not burn unless preheated. Water or foam may cause frothing. Use water to cool fire exposed containers. Water may be used to flush spills away from exposure. Do not enter confined fire space without adequate protective clothing and an approved positive pressure self-contained breathing apparatus.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, oxides of nitrogen and oxides of sulphur may be formed on combustion.

6. ACCIDENTAL RELEASE MEASURES

Spilled material is slippery. Isolate hazard area and restrict access. Wear appropriate breathing apparatus (if applicable) and protective clothing. Stop leak only if safe to do so. Contain a land spill by diking. For large spills remove by mechanical means and place in containers. Clean area with appropriate cleaner. Dispose of recovered material as noted under Disposal Considerations. Notify appropriate environmental agency(ies).

7. HANDLING AND STORAGE

- Handling:** Avoid excessive heat, formation of oil mist, breathing of vapours and mist of hot oil and prolonged or repeated contact with skin. Launder contaminated clothing prior to reuse. Properly dispose of contaminated leather articles, including shoes, that cannot be decontaminated. Use good personal hygiene. Do not allow to freeze.
- Storage:** Store in a cool, dry, well ventilated area, away from heat and ignition sources.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

THE FOLLOWING INFORMATION, WHILE APPROPRIATE FOR THIS PRODUCT, IS GENERAL IN NATURE. THE SELECTION OF PERSONAL PROTECTIVE EQUIPMENT WILL VARY DEPENDING ON THE CONDITIONS OF USE.

OCCUPATIONAL EXPOSURE LIMITS (Current ACGIH TLV/TWA unless otherwise noted):

Oil mist (mineral): 5 mg/m³ (STEL: 10 mg/m³)

- Mechanical Ventilation:** To maintain levels below workplace exposure limits mechanical ventilation recommended. Local ventilation is recommended if oil mist is present or if exposure limit is exceeded. Make up air should always be supplied to balance air exhausted (either generally or locally).

PERSONAL PROTECTIVE EQUIPMENT:

- Eye Protection:** Chemical safety goggles and/or full face shield to protect eyes and face, if product is handled such that it could be splashed into eyes.
- Skin Protection:** Oil impervious gloves (nitrile, neoprene or PVC) should be worn at all times when handling this product. Impervious clothing (apron, coveralls) should also be worn in confined workspaces or where the risk of skin exposure is much higher.
- Respiratory Protection:** If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator. If airborne concentration is high (e.g. when product is heated), use a NIOSH-approved chemical cartridge respirator with organic vapour cartridges in combination with a P95 particulate filter.

9. PHYSICAL DATA

- | | |
|----------------------------------|--------------------------|
| Physical State: | Liquid |
| Appearance: | Light Brown |
| Odour: | Slight Odour |
| Odour Threshold: | Not available |
| Freezing/Pour Point: | Not available |
| Boiling Point: | Not available |
| Density: | <955.5 kg/m ³ |
| Vapour Density (Air = 1): | Not available |

Vapour Pressure (absolute):	Not available
Specific Gravity (Water = 1):	0.9196
pH:	8.7
Flash Point:	Method Cleveland Open Cup >154 degrees C
Lower Explosion Limit:	Not available
Upper Explosion Limit:	Not available
Autoignition Temperature:	Not available
Viscosity:	66.4 - 85.4 cSt @ 40 degrees C
Evaporation Rate (n-BuAc = 1):	Not available
Partition Coefficient (K_{OW}):	Not available
Water Solubility:	Complete
Other Solvents:	None Identified

10. STABILITY AND REACTIVITY

Chemically Stable:	Yes
Hazardous Polymerization:	No
Sensitive to Mechanical Impact:	No
Sensitive to Static Discharge:	No
Incompatible Materials:	Avoid strong oxidizing agents.
Conditions of Reactivity:	Avoid excessive heat, formation of vapours or mists.

11. TOXICOLOGICAL INFORMATION

Ingredient (or Product if not specified) Toxicological Data

Sodium Petroleum Sulfonate

9-Octadecenamide,N,N-Bis(2-Hydroxyethyl)

Ethanol, 2-(2-butoxyethoxy)-

LD50 Oral Rat = 5660 mg/kg

LD50 Dermal Rabbit = 2700 mg/kg

Routes of Exposure:	Exposure may occur via inhalation, ingestion, skin absorption and skin or eye contact.
Irritancy:	Testing completed with this product indicates that it is irritating to the eyes.
Chronic Effects:	Overexposure to components in this product have been found to cause kidney damage, liver abnormalities, anemia and lung damage in laboratory animals. Overexposure to components in this product are suspected to cause liver abnormalities, kidney and lung damage in humans. Long term intensive exposure to oil mist may cause benign lung fibrosis. Prolonged or repeated contact may cause various forms of dermatitis including folliculitis and oil acne.

12. ECOLOGICAL INFORMATION

Environmental Effects:	Block off drains and ditches. Do not allow product or runoff from fire control to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Provincial regulations require and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities.
Biodegradability:	Not available.

13. DISPOSAL CONSIDERATIONS

Waste management priorities (depending on volumes and concentration of waste) are: 1. recycle (reprocess), 2. energy recovery (cement kilns, thermal power generation), 3. incineration, 4. disposal at a licenced waste disposal facility. Do not attempt to combust waste on-site. Incinerate at a licenced waste disposal site with approval of environmental authority. Landfill absorbed material in a government approved site.

14. TRANSPORTATION INFORMATION

Canadian Road and Rail Shipping Classification:

This product is not regulated under the Canadian Transportation of Dangerous Goods Regulations for transport by road and rail.

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations (CPR)* and the MSDS contains all the information required by the CPR.

WHMIS Class: Class D2B Other Toxic Effects - Eye Irritant
DSL/NDSL Status: This product, or all components, are listed on the Domestic Substances List, as required under the Canadian Environmental Protection Act. This product and/or all components are listed on the U.S. EPA TSCA Inventory.
Other Regulatory Status: No Canadian federal standards.

16. ADDITIONAL INFORMATION

LABEL STATEMENTS

Hazard Statement : Irritating to eyes.
Spilled material is slippery.

Handling Statement: Wear suitable gloves and eye protection.
Wear protective clothing.
Wash thoroughly after handling.
DO NOT ALLOW TO FREEZE.

First Aid Statement : Flush eyes with water.
Wash contaminated skin with soap and water.
Do not induce vomiting.
Obtain medical attention.

Revisions:

This MSDS has been reviewed and updated.
Changes have been made to:

- Section 1
- Section 2
- Section 3
- Section 4
- Section 5
- Section 7
- Section 8
- Section 9
- Section 15
- Section 16