

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

OSTREM CHEMICAL CO. LTD.
2310 - 80 AVENUE
EDMONTON AB T6P 1N2

Phone: 780-440-1911 or 780-446-0177
In Case of Emergency Only:
phone CANUTEC at (613) 996-6666

Product name: DEICING-DEFROSTING FLUID

Code: D398

Other name:

Distributed by:

Product use: antifreeze

Date completed: April 01, 2014

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
ethylene glycol	60-100	107-21-1
propylene glycol	10-30	57-55-6

3. HAZARDS IDENTIFICATION

Eye irritant. Harmful if swallowed.

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Induce vomiting only on the direct advice of a poison control centre. Drink 1-2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

Eye contact: Flush with plenty of water for at least 15 minutes. Get medical attention.

Skin contact: Remove contaminated clothing and flush with plenty of water.

5. FIRE - FIGHTING MEASURES

Flash point (test method): >100C

Flammable limits (%): Non-flammable

Lower: Not applicable

Upper: Not applicable

Fire extinguishing substances: Use dry chemicals, carbon dioxide, water spray or foam.

Autoignition temperatures: Not applicable

Hazardous combustion products: May liberate carbon monoxide, carbon dioxide, irritating aldehydes and ketones.

Explosion data:

Sensitivity to mechanical impact: Not applicable

Sensitivity to static discharge: Not applicable

Special firefighting procedures: As for surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear appropriate protective equipment.

Environmental precautions: Prevent from entering sewers, waterways or low areas.

Methods for cleaning up: Isolate hazard area and restrict access. Small spills: soak up with inert absorbent material and scoop into containers. Large spills: prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

7. HANDLING AND STORAGE

Handling: Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Storage: Keep out of reach of children. Keep container tightly closed. Store in a cool, dry area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls: Provide exhaust ventilation to keep airborne levels below recommended exposure limits.
Respiratory protection: Not normally necessary. An N95 NIOSH respirator may be worn.
Eye protection: Chemical goggles. Wear a face shield if splashing hazards exists.
Other protection: Not normally necessary.

Exposure limits:

INGREDIENT	ACGIH	OSHA	Other
ethylene glycol	TLV CEIL: 100mg/m ³	8 hours	
propylene glycol	Not available		

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Liquid	Solubility in water: Complete
Boiling point: 197C	Vapour pressure: Not available
Vapour density: Not available	Evaporation rate: Not available
Freezing point: -15C	Odour threshold: Not available
Sp. Gravity: 1.103	pH: 8.1; 50% solution: 7.8
Appearance & odour: pale yellow liquid	

10. STABILITY AND REACTIVITY

Stability: Stable
Conditions of instability: Not available
Incompatibility: () Water (X) Oxidizers (X) Acid (X) Base () Other
Conditions of reactivity: Not available
Hazardous decomposition products: Not available

11. TOXICOLOGICAL PROPERTIES

POTENTIAL ACUTE HEALTH EFFECTS

Inhalation: Irritating to respiratory system.
Ingestion: Toxic if swallowed. Causes headache, weakness, confusion, dizziness, loss of coordination, fainting, nausea and vomiting, increased heart rate, decreased blood pressure, difficulty breathing and seeing, pulmonary edema, unconsciousness, convulsions, collapse and coma. Severe poisoning may cause death.
Eye contact: May cause temporary discomfort and redness
Skin contact: May cause temporary discomfort
Skin absorption: Not available

POTENTIAL CHRONIC HEALTH EFFECTS:

Inhalation: Repeat or prolonged exposure may cause damage to lungs.
Ingestion: Not available
Eye contact: Not available
Skin contact: Prolonged contact may cause discomfort
Skin absorption: Not available

Irritancy of product: See WHMIS criteria
Sensitization of product: Not available
Carcinogenicity: IARC (1, 2A or 2B) No known significant effects.

ACGIH: (A1, A2 or A3)

Reproductive toxicity:

Teratogenicity:

Mutagenicity:

Synergistic product:

No known significant effects.

No known significant effects.

No known significant effects.

No known significant effects.

Not available

HAZARDOUS INGREDIENTS

ethylene glycol

CAS NO.

107-21-1

TOXICITY DATA

LD50 oral rat: 4700 mg/kg

LD50 dermal rabbit: 9530 mg/kg

propylene glycol

57-55-6

Not available

12. ECOLOGICAL INFORMATION

Ecotoxicological information:

Not available

Other information:

13. DISPOSAL CONSIDERATIONS

Waste disposal: Disposal of all waste must be done according to local, provincial and federal regulations.

14. TRANSPORT INFORMATION

TDG classification:

Not regulated

15. REGULATORY INFORMATION

WHMIS:

D2A

Material Causing Other Toxic Effects

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.

16. PREPARATION INFORMATION

Prepared by: Technical Services Department, Ostrem Chemical Co. Ltd., Ph: (780) 440-1911