

## 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:** H-100 GLYCOL  
**Other name:**  
**Distributed by:**  
**Product use:** antifreeze  
**Date completed:** April 01, 2014

Code: S775

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	%W/W	CAS number
ethylene glycol	60-100	107-21-1

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### 3. HAZARDS IDENTIFICATION

Eye irritant. Harmful if swallowed.

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### 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.

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### 5. FIRE - FIGHTING MEASURES

**Flash point (test method):** 116C (pensky-martens)  
**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.

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### 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.

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### 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.

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## 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 <sup>3</sup> 8 hours		

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Liquid	<b>Solubility in water:</b> Complete
<b>Boiling point:</b> 197C	<b>Vapour pressure:</b> Not available
<b>Vapour density:</b> Not available	<b>Evaporation rate:</b> Not available
<b>Freezing point:</b> -13C	<b>Odour threshold:</b> Not available
<b>Sp. Gravity:</b> 1.113	<b>pH:</b> 8.87
<b>Appearance &amp; odour:</b> clear, colourless liquid	

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## 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

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## 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

<b>Irritancy of product:</b>	See WHMIS criteria
<b>Sensitization of product:</b>	Not available
<b>Carcinogenicity:</b> IARC (1, 2A or 2B)	No known significant effects.
ACGIH: (A1, A2 or A3)	No known significant effects.
<b>Reproductive toxicity:</b>	No known significant effects.
<b>Teratogenicity:</b>	No known significant effects.

**Mutagenicity:** No known significant effects.  
**Synergistic product:** Not available

HAZARDOUS INGREDIENTS	CAS NO.	TOXICITY DATA
ethylene glycol	107-21-1	LD50 oral rat: 4700 mg/kg LD50 dermal rabbit: 9530 mg/kg

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## 12. ECOLOGICAL INFORMATION

**Ecotoxicological information:** Not available  
**Other information:**

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## 13. DISPOSAL CONSIDERATIONS

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

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## 14. TRANSPORT INFORMATION

**TDG classification:** Not regulated

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## 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.

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## 16. PREPARATION INFORMATION

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