

Safety Data Sheet

1. IDENTIFICATION

Product Identifier: H-4555 GLYCOL SOLUTION **Date of Revision:** January 20, 2017
Product Code: D374
Other Name(s):
Distributed By:
Recommended Use and Restrictions on Use: antifreeze
Manufactured By: Ostrem Chemical Co. Ltd. Phone: 780-440-1911
2310 - 80th Avenue NW In Case of Emergency Only, Phone
Edmonton, Alberta, Canada T6P 1N2 CANUTEC: 613-996-6666
www.ostrem.com

2. HAZARDS IDENTIFICATION

Classification of the Mixture: Specific Target Organ Toxicity (Repeated Exposure) - Category 2

Label Elements:

Hazard Pictogram(s):



Signal Word: WARNING

Hazard Statement(s): May cause damage to organs (kidneys, liver, central nervous system) through prolonged or repeated exposure.

Precautionary Statement(s):

- Prevention:** Do not breathe fumes or vapours.
- Response:** Get medical advice/attention if you feel unwell.
- Storage:** not applicable
- Disposal:** Dispose of contents/container in accordance with local/regional/national/international regulations.

Physical/health hazards not otherwise classified:

There is a marked difference in acute oral toxicity between rodents and man, man being more susceptible than rodents. The estimated fatal dose for man is 100 milliliters (1/2 cup).

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>Conc.</u>	<u>CAS #</u>	<u>Common Names</u>
ethylene glycol	45.0%	107-21-1	

4. FIRST-AID MEASURES

Necessary Measures:

Get medical advice/attention if you feel unwell.

Most important symptoms, both acute and delayed:

May cause damage to organs (kidneys, liver, central nervous system) through prolonged or repeated exposure.

Indication of immediate medical attention and special treatment needed, if necessary:

not applicable

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use extinguishing media appropriate for surrounding fire.

Specific hazards arising from the chemical (e.g.: hazardous combustion products):

May liberate carbon monoxide, carbon dioxide, irritating aldehydes and ketones.

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Special protective equipment and precautions for firefighters:

As for surrounding fire. Firefighters should wear full protective clothing and self contained breathing equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear appropriate protective equipment. See section 8.

Environmental precautions:

Prevent from entering sewers, waterways or low areas.

Methods and materials for containment and 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

Precautions for safe handling:

Do not breathe fumes or vapours.
Do not ingest. Avoid contact with eyes, skin and clothing.

Conditions for safe storage, including any incompatibilities:

Keep out of reach of children. Store in a cool, dry area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters - Exposure limits:

<u>Ingredient:</u>	<u>Limit:</u>
ethylene glycol	TWA: 100 mg/m ³ ACGIH (TLV)
	CEIL: 125 mg/m ³ OSHA (PEL)
	CEIL: 50 ppm OSHA (PEL)

Appropriate engineering controls:

Provide exhaust ventilation to keep airborne levels below recommended exposure limits.

Respiratory protection:

If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator.

Other protection:

not applicable

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour etc.):	clear, colourless liquid
Odour:	not available
Odour threshold:	not available
pH:	8-9
Melting/Freezing point:	-30°C / -22°F
Initial boiling point and range:	not available
Flash point:	not applicable
Evaporation rate:	not available
Flammability (solid, gas):	not available
Upper/lower flammability or explosive limits:	not available
Vapour pressure:	not available
Vapour density:	not available
Relative density (specific gravity):	1.060
Solubility(ies):	complete
Partition co-efficient: n-octanol/water:	not available
Auto-ignition temperature:	not available
Decomposition temperature:	not available
Viscosity:	not available

10. STABILITY AND REACTIVITY

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Reactivity:

This material is considered to be non-reactive under normal use conditions.

Chemical stability:

Stable.

Possibility of hazardous reactions:

not available

Conditions to avoid (e.g.: static discharge, shock or vibration):

not applicable

Incompatible materials:

Oxidizers / Acid / Base

Hazardous decomposition products:

not available

11. TOXICOLOGICAL INFORMATION

POTENTIAL ACUTE HEALTH EFFECTS

Inhalation: May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed.

Eye contact: May cause eye irritation.

Skin contact: May cause mild skin irritation.

Skin absorption: not available

POTENTIAL CHRONIC HEALTH EFFECTS

Inhalation: not available

Ingestion: not available

Eye contact: not available

Skin contact: not available

Skin absorption: not available

Mutagenicity: not available

Carcinogenicity: This information, if applicable, can be found in Section 2.

Reproductive toxicity: This information, if applicable, can be found in Section 2.

Sensitization of product: This information, if applicable, can be found in Section 2.

Specific Target Organ Toxicity - single exposure: This information, if applicable, can be found in Section 2.

Specific Target Organ Toxicity - repeated exposure: This information, if applicable, can be found in Section 2.

Toxicological Data:Ingredient:

ethylene glycol

Data:

Oral LD50: 4700 mg/kg (rat)

Other Toxicological Information on Ingredients:ethylene glycol

There is a marked difference in acute oral toxicity between rodents and man, man being more susceptible than rodents. The estimated fatal dose for man is 100 milliliters (1/2 cup). This material has also been shown to be toxic and potentially lethal by ingestion to cats and dogs.

The substance may be toxic to kidneys, liver, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

12. ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available): not available

Persistence and degradability: not available

Bioaccumulative potential: not available

Mobility in soil: not available

Other adverse effects: not available

Ecological Information on Ingredients: not available

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13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

TDG classification: NON-REGULATED

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. PREPARATION INFORMATION

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

Date of Preparation: January 20, 2017

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This Safety Data Sheet may not be changed or altered in any way without the express knowledge and permission of Ostrem Chemical Co. Ltd.

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