

PROPYLENE GLYCOL or Recofreeze PG Concentrate

SECTION 1. IDENTIFICATION

Product Identifier	PROPYLENE GLYCOL or Recofreeze PG Concentrate
Other Means of Identification	25-349, 25-369, 25-369-1000, 25-369PC, 34-452WDS, 25-579, 35-364PR, 18-308, 18-308-40, 18-309, 18-309-1000, BULK-18300Y
Recommended Use	Please refer to Product label.
Restrictions on Use	None known.
Manufacturer/Supplier Identifier	Recochem Inc., 850 Montee de Liesse, Montreal, QC, H4T 1P4, Compliance and Regulatory Department, 905-878-5544, www.recochem.com
Emergency Phone No.	CANUTEC, 613-996-6666, 24 Hours
SDS No.	1909

SECTION 2. HAZARD IDENTIFICATION

Classification

Eye irritation - Category 2B

Label Elements

Signal Word:
Warning

Hazard Statement(s):

H320 Causes eye irritation.

Precautionary Statement(s):

Prevention:
P264 Wash hands and skin thoroughly after handling.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/attention.

Storage:

Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

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Substance:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
1,2-Propylene glycol	57-55-6	80-100		

Notes

Use of Generic SDS:

If the concentration or actual concentration range of an ingredient of a particular hazardous product in the series is different from the concentration or actual concentration range disclosed for the rest of the series, either the concentration or the actual concentration range must be indicated beside that ingredient under item 3 (Composition/Information on ingredients) of the SDS. Furthermore, if any other specific information element(s) (such as flash point, numerical measure of toxicity, etc.) for a particular hazardous product in the series differs from that of the other products in the series (without affecting the classification), the information element relevant to that hazardous product must be disclosed on the SDS with an indication to which hazardous product each relates.

Source: Health Canada - Technical Guidance on the Requirements of the Hazardous Products Act and the Hazardous Products Regulations WHMIS 2015 Supplier Requirements - pg 117

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Get medical advice or attention if you feel unwell or are concerned. If skin irritation occurs, get medical advice or attention. Clean clothing, shoes and leather goods.

Eye Contact

Avoid direct contact. Wear chemical protective gloves if necessary. Quickly and gently blot or brush chemical off the face. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice or attention.

Ingestion

Rinse mouth with water. Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Immediate Medical Attention and Special Treatment

Target Organs

Skin.

Special Instructions

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Medical Conditions Aggravated by Exposure

Dermatitis.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire. Use water to keep non-leaking, fire-exposed containers cool.

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Unsuitable Extinguishing Media

None known.

Specific Hazards Arising from the Product

Can ignite if strongly heated. Closed containers may rupture violently when heated releasing contents. Not sensitive to static discharge.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills. See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for Safe Storage

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA

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1,2-Propylene glycol	Not established	Not established	Not established	Not established	10 mg/m3	Not established
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Appropriate Engineering Controls

General ventilation is usually adequate. For large scale use of this product: provide eyewash in work area, if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Not required, if used as directed.

Respiratory Protection

Not normally required if product is used as directed.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Available in these colours: Clear, Yellow, Gold, Red, Blue, Green, Amber, Pink, Orange, Purple, White, Brown, Grey.
Odour	Odourless
Odour Threshold	Not available
pH	Not available
Melting Point/Freezing Point	-60 °C (-76 °F) (melting); -60 °C (-76 °F) (freezing)
Initial Boiling Point/Range	187.6 °C (369.7 °F)
Flash Point	99 °C (210 °F) (closed cup)
Evaporation Rate	0.01 (n-butyl acetate = 1)
Flammability (solid, gas)	Not applicable
Upper/Lower Flammability or Explosive Limit	12.5% (upper); 2.6% (lower)
Vapour Pressure	0.11 kPa (0.83 mm Hg) at 20 °C
Vapour Density (air = 1)	Not applicable
Relative Density (water = 1)	1.036 - 1.100 at 20 °C
Solubility	Soluble in water; Soluble in all proportions in common organic solvents.
Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	371 °C (700 °F)
Decomposition Temperature	Not available
Viscosity	54.05 mm ² /s at 20 °C (kinematic); 56 mPa.s at 20 °C (dynamic)
Other Information	
Physical State	Liquid
Molecular Weight	76.10
Other Physical Property 1	Reserve Alkalinity: 7.0 ml (MIN)

SECTION 10. STABILITY AND REACTIVITY

Reactivity

None known.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

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None known.

Conditions to Avoid

High temperatures. Temperatures above 99.0 °C (210.2 °F)

Incompatible Materials

Increased risk of fire and explosion on contact with: strong oxidizing agents (e.g. perchloric acid).

Not corrosive to metals.

Hazardous Decomposition Products

None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure

Eye contact.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
1,2-Propylene glycol	Not available	14800 mg/kg (rabbit)	20800 mg/kg (rabbit)

LC50: Not applicable.

LD50 (oral): Not applicable.

LD50 (dermal): Not applicable.

Skin Corrosion/Irritation

Human experience and animal tests show no or very mild irritation.

Serious Eye Damage/Irritation

Human experience and animal tests show mild irritation. Symptoms include sore, red eyes, and tearing.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Not harmful based on information for closely related materials.

Skin Absorption

Not harmful based on information for closely related materials.

Ingestion

Not harmful based on animal tests.

Aspiration Hazard

Not known to be an aspiration hazard.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause Following skin contact: at high concentrations dermatitis. Symptoms may include dry, red, cracked skin (dermatitis).

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

Chemical Name	IARC	ACGIH®	NTP	OSHA
1,2-Propylene glycol	Not Listed	Not designated	Not Listed	Not Listed

Reproductive Toxicity

Development of Offspring

Does not cause harm to the unborn child.

Sexual Function and Fertility

Does not cause effects on sexual function or fertility.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

Not known to be a mutagen.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute Aquatic Toxicity

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
1,2-Propylene glycol	Not available	10000 mg/L (Daphnia magna (water flea); 48-hour)		

Chronic Aquatic Toxicity

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
1,2-Propylene glycol	52930 mg/L (Pimephales promelas (fathead minnow); 96 hrs)		Not available	

Persistence and Degradability

No information was located.

Bioaccumulative Potential

No information was located.

Mobility in Soil

No information was located.

Other Adverse Effects

There is no information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Environmental Not applicable

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Hazards**Special Precautions** Not applicable**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

SECTION 15. REGULATORY INFORMATION**Safety, Health and Environmental Regulations****Canada****Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

All ingredients are listed on the DSL/NDSL.

USA**Toxic Substances Control Act (TSCA) Section 8(b)**

All ingredients are listed on the TSCA Inventory.

Custom Regulatory 1

Consumer Product Safety Improvement Act of 2008 General Conformity Certification

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product container.

SECTION 16. OTHER INFORMATION**SDS Prepared By** Compliance and Regulatory Department**Phone No.** 905-878-5544**Date of Preparation** March 20, 2018**References** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS).**Additional Information** We are committed to uphold the Industry Consumer Ingredient Communication Voluntary Initiative.
Please send us your request by visiting our website at www.recochem.com.

Ingredients present (intentionally added ingredients) at a concentration of greater than one percent (1%) shall be listed in descending order of predominance. Ingredients present at a concentration of not more than one percent shall be listed but may be disclosed without respect to order of predominance.

Disclaimer

Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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