



Safety Data Sheet - GHS

Propylene Glycol 50%

Date of Revision: April 1, 2025

Section 1 - Chemical Product and Company Identification

Product Name	Propylene Glycol 50%
Synonyms	Propylene glycol; 1,2-Propanediol; Propane-1,2-diol; PG 50
Product Use	Industrial Heat Transfer Fluid
Restrictions On Use	Not Applicable
Supplier	CFR Chemicals 38451 Range Road 22 County of Red Deer T4E 2N6
General Assistance	1 (877) 269-3419
Emergency Telephone	Not Dangerous Goods – Call General Assistance
Date of Preparation of SDS	April 1, 2017

Section 2 – Hazard Identification

Signal Word	None
GHS Pictogram(s)	None
Hazard Statement	Non Hazardous
Precautionary Statement	Non Hazardous
Prevention	Non Hazardous
Response	Non Hazardous
Storage	Non Hazardous
Disposal	Non Hazardous
GHS Classification	None – Not a Regulated Product
Other Hazards	None

Section 3 – Composition Information on Ingredients

HAZARDOUS INGREDIENT, Common Name	Hazardous Ingredient, Synonyms	PERCENT	CAS NUMBER
Propylene Glycol	Propylene glycol; 1,2-Propanediol; Propane-1,2-diol; PG	50%	57-55-6
Water	H ₂ O, Aqua	50%	7732-18-5
* = Various ** = Mixture *** = Proprietary			
Chemical Formula	Not Applicable		

Section 4 - First Aid Measures

Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
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Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin Contact	Wash off with plenty of water. Consult a physician.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most Important Symptoms/Effects both Acute and Delayed	Not expected to present a significant hazard under anticipated conditions of normal use.
Note to Physician	No specific antidote. Treatment of exposure should be directed at the control of the symptoms and the clinical condition of the patient.

Section 5 – Fire-Fighting Measures

Flash Point (°C)	Not Flammable
Flash Point Method	PMCC
Auto Ignition Temperature	415°C
Conditions of Flammability	Not flammable or combustible.
Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable Extinguishing Media	Water jet.
Unusual Fire/Explosion Hazard	No data available.
Hazardous Combustion Products	Carbon oxides.
Fire Fighting Equipment	Wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.
Special Precautions for Firefighters	Do not enter fire area without proper protective equipment, including respiratory protection.

Section 6 – Accidental Release Measures

Personal precautions	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapour can accumulate in low areas.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up	Soak up with inert absorbent material and secure for safe disposal. Keep in suitable, closed containers for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.

Section 7 – Handling and Storage

Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Hygroscopic.
Incompatible Materials	Strong acids, Strong bases, Sources of ignition, Direct sunlight.

Section 8 – Exposure Controls / Personal Protection

Occupational Exposure Limits

Ingredient Name

Propylene Glycol

Exposure Limits

Canada, Alberta OHSC Code

200mg/m³

ACGIH TLV

TLV: 100mg/m³

Personal protective equipment

Eye/face protection

Chemical safety glasses with side shields to prevent eye contact. As a general rule do not wear contact lenses when handling chemicals. If contact is possible, the following protection should be worn: Splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts. If inhalation hazards exist, a full-face respiratory may be required instead.

Skin protection

Wear chemical resistant gloves, impermeable protective clothing and safety shoes. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary.

General hygiene

Considerations

Handle in accordance with good industrial hygiene and safety. Eye wash fountains and safety showers must be easily accessible.

Specific engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Use explosion-proof ventilation equipment.

Section 9 – Physical and Chemical Properties

Physical State	Liquid	Water Solubility	miscible
Appearance & Odour	Clear, colourless. Odourless.	Boiling Point	>100°C
Vapour Pressure	0.011 kPa (20.0°C)	Boiling Point Range	Not applicable
Vapour Density	2.5 (Air = 1)	Melting Point	-34°C
Specific Gravity	1.03 – 1.05	Freezing Point	-34°C
Partition coefficient (n-octanol/water)	Not available.	Lower Explosive Limit (LEL)	2.6 %

octonal/water)

pH	5.0 – 9.0 Neat	Upper Explosive Limit (UEL)	12.5 %
Flashpoint (Method)	Not flammable	Auto Ignition temperature	415°C
Odour Threshold	Not available.	Evaporation Rate	Not available.
Flammability (Solid, Gas)	Not available.		
Decomposition Temperature	Not available.	Viscosity	Not available.

Section 10 – Stability and Reactivity

Reactivity	No specific test data related to reactivity available for this product.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available.
Conditions to avoid	Sources of ignition, Direct sunlight
Materials to avoid	Acid chlorides, Acid anhydrides, Oxidizing agents, Chloroformates, Reducing agents
Hazardous decomposition products	Carbon oxides.

Section 11- Toxicological Information

Information on Likely Routes of Exposure

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin contact	Harmful if absorbed through the skin. May cause skin irritation.
Eye contact	May cause eye irritation.
Ingestion	May be harmful if swallowed.
Acute and Chronic Toxicity	May be harmful if swallowed.

Acute toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Propylene Glycol	LD50 Oral	Rat	20000mg/kg	-
	LD50 Dermal	Rabbit	20800mg/kg	-

Skin corrosion/irritation Not classified.

Serious eye damage/ Eye irritation

Not classified.

Respiratory or skin sensitization

Not classified.

Mutagenicity

Not classified.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

Reproductive toxicity

Not classified.

Teratogenicity

Not classified.

Specific target organ toxicity - single exposure (Globally Harmonized System)

Not classified.



Safety Data Sheet - GHS

Propylene Glycol 50%

Date of Revision: April 1, 2025

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

Not classified.

Aspiration hazard

Not classified.

Delayed and Immediate Effects and also Chronic Effects from Short and Long Term Exposure

Short Term Exposure

Potential immediate Health Effects No data available.

Potential Delayed Health Effects No data available.

Long Term Exposure

Potential immediate Health Effects No data available.

Potential Delayed Health Effects No data available.

Potential Chronic Effects No data available.

Synergistic effects No data available

Section 12 – Ecological Information

Toxicity

Product / Ingredient Name	Result	Species	Exposure
Propylene Glycol	LC50 52930mg/L	Fish – Pimephales promelas	96 Hr
	EC50 >10000mg/L	Daphnia – Daphnia magna	24 Hr

Persistence and degradability Biodegrades readily and rapidly in the presence of oxygen; 55-57% in 5 days, 78-84% in 20 days; also 99% in 1-2 days (2 tests) – **rapid biodegradation means Chronic Aquatic Toxicity testing not required**

Bioaccumulative potential Does not bioaccumulate.

Mobility in soil Water soluble; moves readily in soil and water.

PBT and vPvB assessment No data available

Section 13 – Disposal Considerations

Product

Do not discharge substance/product into sewer system. Dispose of in accordance with national, regional, and local regulations.

Contaminated packaging

Dispose of as unused product in a licensed facility. Recommend crushing, puncturing, or other means to prevent unauthorized use of used containers. Do not cut, weld, or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled materials and runoff and contain with soil, waterways, drains, and sewers.

Section 14 - Transportation Information

CANADA Transportation of Dangerous Goods (TDG)

Not Dangerous Goods



Safety Data Sheet - GHS

Propylene Glycol 50%

Date of Revision: April 1, 2025

Section 15 – Regulatory Information

**DSL (Canadian Domestic Substances List)
and CEPA (Canadian Environmental Protection Act)**

All components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

TSCA Inventory

All components are listed or exempted.

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

Section 16 – Other Information

REVISION SUMMARY:

Date of Preparation	April 1, 2017
Date of Revision	April 1, 2025

SDS Prepared by: CFR Lab Manager

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