



Safety Data Sheet - GHS

Propylene Glycol, Food Grade

Date of Revision: Oct 14, 2020

Section 1 - Chemical Product and Company Identification

Product Name	Propylene Glycol, Food Grade
Synonyms	Propylene glycol, USP Grade; 1,2-Propanediol; Propane-1,2-diol; PG, Food Grade Propylene Glycol
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	October 14, 2020

Section 2 – Hazard Identification

Signal Word	Warning
GHS Pictogram(s)	None
Hazard Statement	No Statements
Precautionary Statement	No Statements
Prevention	No Statements
Response	No Statements
Storage	No Statements
Disposal	No Statements
GHS Classification	None

HMIS Classification

Health Hazard	0
Chronic Health Hazard	*
Flammability	1
Physical Hazards	0

Potential Health Effects

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

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-	100%	57-55-6

diol; PG

* = Various ** = Mixture *** = Proprietary

Chemical FormulaC₃H₈O₂**Section 4 - First Aid Measures**

Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
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)	103°C
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.
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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 dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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	Exposure Limits
Propylene Glycol	Canada, Alberta OHSC Code 200mg/m ³ ACGIH TLV TLV: 100mg/m ³

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 respirator 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	187°C
Vapour Pressure	0.011 hPa (20.0°C)	Boiling Point Range	Not applicable
Vapour Density	2.6 (Air = 1)	Melting Point	-60°C
Specific Gravity	1.0362	Freezing Point	-60°C
Partition coefficient (n-octonal/water)	Not available.	Lower Explosive Limit (LEL)	2.6 %
pH	7 – 7.2 Neat	Upper Explosive Limit (UEL)	12.6 %
Flashpoint (Method)	Not flammable	Auto Ignition temperature	415°C
Odour Threshold	Not available.	Evaporation Rate	Not available.
Flammability (Solid, Gas)	Not available.	Viscosity	Not available.
Decomposition Temperature	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	-



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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.
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



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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

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:

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SDS Prepared by: CFR Lab Manager

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