Safety Data Sheet - GHS
CFR P301

Date of Revision: April 1, 2025

Section 1 - Chemical Product and Company Identification

Product Name	CFR P301 Propylene Glycol Inhibitor
Synonyms	Not available
Product Use	Various use, chemical intermediate, 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 Danger

GHS Pictogram(s)

Hazard Statement:	
H314	Causes severe skin burns and eye damage.
Precautionary Statement	
P260	Do not breath dust/gas/mist/vapours.
P264	Wash skin thoroughly after handling.
P280	Wear protective gloves/eye protection/face protection.
Response	
P321	Specific treatment (see supplemental first aid instructions on this label).
P310	Immediately call a POISON Center or doctor/physician.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (OR HAIR): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363	Wash contaminated clothing before reuse.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 +P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	
P405	Store locked up.
Disposal	
P501	Dispose of contents/container to an approved waste disposal unit.

GHS Classification Skin corrosion/irritation (Category 1A)

HMIS Classification

Health Hazard **1**

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

Potential Health Effects

Inhalation	May be harmful if inhaled.
Skin	Causes severe skin burns and eye damage.
Eye	Causes eye irritation.
Ingestion	May be harmful if swallowed.

Section 3 – Composition Information on Ingredients

HAZARDOUS INGREDIENT, Common Name	Hazardous Ingredient, Synonyms	PERCENT	CAS NUMBER
Potassium hydroxide	Caustic Potash, Lye	13 – 23%	1310-5-3
Phosphoric acid, 75%, aqueous solution	Orthophosphoric Acid	14 – 25%	7664-38-2
Propylene Glycol	1,2-propanediol, PG	7.5 – 17%	57-55-6
Boric Acid	Not Applicable	1.5 – 5%	10043-35-3
Sodium 4(or 5)-methyl-1H-benzotriazolide	Not Applicable	0 – 2.3%	64665-57-2
Polydimethylsiloxane	Not Applicable	0 – 0.45%	63147-62-9
Silica filled polydimethylsiloxane	Not Applicable	0 – 0.225%	67762-90-7
Sucrose distearate	Not Applicable	0 – 0.225%	27915-16-0

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

Section 4 - First Aid Measures

Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower lids. Check for and remove contact lenses. Continue to rinse for at least 15 minutes. Get medical attention.
Skin Contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Get medical attention immediately. Call a poison control centre or physician. IF alert, rinse mouth and drink ½ to 1 glass of water to help dilute the material. Do not give liquids to a drowsy, convulsion, or unconscious patient. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so vomit does not enter the lungs. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband.

Most Important Symptoms/Effects both Acute and Delayed

	Causes severe skin burns and irritation.
Note to Physician	No information available.

Section 5 – Fire-Fighting Measures

Flash Point (°C)	Not applicable
Flash Point Method	PMCC
Auto Ignition Temperature	No data available
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	No data available.

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 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 oxidizing agents. Strong bases

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
Potassium hydroxide	**Canada, Alberta OHSC Code** None established **ACGIH** Ceiling: 2mg/m^3
Phosphoric acid, 75%, aqueous solution	**Canada, Alberta OHSC Code** 1mg/m^3 **ACGIH** TWA: 1mg/m^3 STEL: 3mg/m^3
Boric Acid	**Canada, Alberta OHSC Code** None established **ACGIH** TWA: 2mg/m^3 STEL: 6mg/m^3
Sodium 4(or 5)-methyl-1H-benzotriazolide	**Canada, Alberta OHSC Code** None established
Polydimethylsiloxane	**Canada, Alberta OHSC Code** None established
Silica filled polydimethylsiloxane	**Canada, Alberta OHSC Code** None established
Sucrose distearate	**Canada, Alberta OHSC Code** TWA: 10mg/m^3 (Stearates in general)

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 to pale yellow. Odourless.	**Boiling Point**	100°C
Vapour Pressure	2.4 mmHg (20.0°C)	**Boiling Point Range**	100 – 196°C
Vapour Density	1.3 (Air = 1)	**Melting Point**	-30°C
Specific Gravity	1.44	**Freezing Point**	-30°C
Partition coefficient (n-octonal/water)	Not available.	**Lower Explosive Limit (LEL)**	Not Available
pH	Slightly alkaline	**Upper Explosive Limit (UEL)**	Not Available
Flashpoint (Method)	Not flammable	**Auto Ignition temperature**	Not Available
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	Thermal decomposition generates: Corrosive vapours.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available.
Conditions to avoid	No data available.
Materials to avoid	Strong acids. Strong oxidizing agents. Strong bases
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

Causes severe skin burns and irritation.

Eye contact

May cause eye irritation.

Ingestion

May cause abdominal discomfort or pain, nausea, vomiting, dizziness, drowsiness, malaise, blurring of vision, irritability, lumbar pain, oliguria, uremia, and central nervous system effects, including irregular eye movements, convulsions and coma. Cardiac failure, pulmonary edema, and severe kidney damage may develop. May be fatal if swallowed, lethal dose in adult humans for ethylene glycol is approximately 100 mL

Acute and Chronic Toxicity

Poison. Toxic if swallowed. If swallowed there is a risk of blindness.

Acute toxicity

Product/Ingredient Name	Result	Species	Dose	Exposure
Potassium hydroxide	LD50 Oral	Rat	333mg/kg	-
Phosphoric acid, 75%, aqueous solution	LD50 Oral	Rat	4400mg/kg	-
Propylene Glycol	LD50 Oral	Rat	20000mg/kg	-
	LD50 Dermal	Rabbit	20800mg/kg	-
Boric Acid	LD50 Oral	Rat	>2000mg/kg	-
	LD50 Dermal	Rabbit	>2000mg/kg	-
Sodium 4(or 5)-methyl-1H-benzotriazolide	LD50 Oral	Rat	2660mg/kg	
	LD50 Dermal	Rabbit	>2000mg/kg	
Polydimethylsiloxane	No data available			
Silica filled polydimethylsiloxane	No data available			
Sucrose distearate	No data available			

Skin corrosion/irritation Causes severe skin burns and eye damage.

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.

Reproductive toxicity Not classified.

Teratogenicity Not classified.

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

No data available.

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

No data available.

Aspiration hazard No data available.

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

Potassium hydroxide	LC50 28.6mgL	Fish – Pisces	96 Hr
Phosphoric acid, 75%, aqueous solution	LC50 138mgL	Fish – Pisces	96 Hr
Propylene	LC50 52930mg/L	Fish – Pimephales promelas	96 Hr
	EC50 >10000mg/L	Daphnia – Daphnia magna	24 Hr
Boric Acid	LC50 100ppm	Fish – Oncorhynchus mykiss	96 Hr
	EC50 658-875mg/L	Daphnia – Dapnhia magna	48 Hr
Sodium 4(or 5)-methyl-1H-benzotriazolide	LC 50 25mgL	Fish – Oncorhynchus mykiss	96 Hr
	EC 50 280mg/L	Daphnia – Daphnia magna	24 Hr
Polydimethylsiloxane	No data available		
Silica filled polydimethylsiloxane	No data available		
Sucrose distearate	No data available		

Persistence and degradability Not established.
Bioaccumulative potential Not established.
Mobility in soil No data available.
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

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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