

### Section 1 - Chemical Product and Company Identification

|                                   |  |
|-----------------------------------|--|
| <b>Product Name</b>               | CFR P301 Propylene Glycol Inhibitor                                |
| <b>Synonyms</b>                   | Not available  |
| <b>Product Use</b>                | Various use, chemical intermediate, heat transfer fluid            |
| <b>Restrictions On Use</b>        | Not Applicable   |
| <b>Supplier</b>                   | CFR Chemicals<br>38451 Range Road 22<br>County of Red Deer T4E 2N6 |
| <b>General Assistance</b>         | 1 (877) 269-3419   |
| <b>Emergency Telephone</b>        | <b>Not Dangerous Goods – Call General Assistance</b>               |
| <b>Date of Preparation of SDS</b> | <b>April 1, 2017</b>   |

### Section 2 – Hazard Identification

**Signal Word** Danger

**GHS Pictogram(s)**



|                                |  |
|--------------------------------|--|
| <b>Hazard Statement:</b>       |  |
| H314                           | Causes severe skin burns and eye damage.   |
| <b>Precautionary Statement</b> |  |
| P260                           | Do not breath dust/gas/mist/vapours.   |
| P264                           | Wash skin thoroughly after handling.   |
| P280                           | Wear protective gloves/eye protection/face protection.   |
| <b>Response</b>                |  |
| 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. |
| <b>Storage</b>                 |  |
| P405                           | Store locked up.   |
| <b>Disposal</b>                |  |
| P501                           | Dispose of contents/container to an approved waste disposal unit.  |
| <b>GHS Classification</b>      | Skin corrosion/irritation (Category 1A)  |
| <b>HMIS Classification</b>     |  |
| <b>Health Hazard</b>           | <b>1</b>   |

**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**

**Note to Physician**

Causes severe skin burns and irritation.  
No information available.

**Section 5 – Fire-Fighting Measures**

|   |   |
|---|---|
| <b>Flash Point (°C)</b>                     | Not applicable  |
| <b>Flash Point Method</b>                   | PMCC  |
| <b>Auto Ignition Temperature</b>            | No data available   |
| <b>Conditions of Flammability</b>           | Not flammable or combustible.   |
| <b>Extinguishing Media</b>                  | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.  |
| <b>Unsuitable Extinguishing Media</b>       | Water jet.  |
| <b>Unusual Fire/Explosion Hazard</b>        | No data available.  |
| <b>Hazardous Combustion Products</b>        | Carbon oxides.  |
| <b>Fire Fighting Equipment</b>              | Wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode. |
| <b>Special Precautions for Firefighters</b> | No data available.  |

**Section 6 – Accidental Release Measures**

|  |  |
|--|--|
| <b>Personal precautions</b>                                  | 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. |
| <b>Environmental precautions</b>                             | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.   |
| <b>Methods and materials for containment and cleaning up</b> | Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.   |

**Section 7 – Handling and Storage**

|                                      |   |
|--------------------------------------|---|
| <b>Precautions for safe handling</b> | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.   |
| <b>Conditions for safe storage</b>   | 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.<br>Hygroscopic. |
| <b>Incompatible Materials</b>        | Strong acids. Strong oxidizing agents. Strong bases   |

**Section 8 – Exposure Controls / Personal Protection****Occupational Exposure Limits**

| <b>Ingredient Name</b>                   | <b>Exposure Limits</b>  |
|--|---|
| Propylene Glycol                         | <b>Canada, Alberta OHSC Code</b><br>200mg/m <sup>3</sup><br><b>ACGIH TLV</b><br>TLV: 100mg/m <sup>3</sup>                     |
| Potassium hydroxide                      | <b>Canada, Alberta OHSC Code</b><br>None established<br><b>ACGIH</b><br>Ceiling: 2mg/m <sup>3</sup>                           |
| Phosphoric acid, 75%, aqueous solution   | <b>Canada, Alberta OHSC Code</b><br>1mg/m <sup>3</sup><br><b>ACGIH</b><br>TWA: 1mg/m <sup>3</sup><br>STEL: 3mg/m <sup>3</sup> |
| Boric Acid                               | <b>Canada, Alberta OHSC Code</b><br>None established<br><b>ACGIH</b><br>TWA: 2mg/m <sup>3</sup><br>STEL: 6mg/m <sup>3</sup>   |
| Sodium 4(or 5)-methyl-1H-benzotriazolide | <b>Canada, Alberta OHSC Code</b><br>None established  |
| Polydimethylsiloxane                     | <b>Canada, Alberta OHSC Code</b><br>None established  |
| Silica filled polydimethylsiloxane       | <b>Canada, Alberta OHSC Code</b><br>None established  |
| Sucrose distearate                       | <b>Canada, Alberta OHSC Code</b><br>TWA: 10mg/m <sup>3</sup> (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

|  |  |                                    |                |
|--|--|------------------------------------|----------------|
| <b>Physical State</b>                          | Liquid                                       | <b>Water Solubility</b>            | miscible       |
| <b>Appearance &amp; Odour</b>                  | Clear, colourless to pale yellow. Odourless. | <b>Boiling Point</b>               | 100°C          |
| <b>Vapour Pressure</b>                         | 2.4 mmHg (20.0°C)                            | <b>Boiling Point Range</b>         | 100 – 196°C    |
| <b>Vapour Density</b>                          | 1.3 (Air = 1)                                | <b>Melting Point</b>               | -30°C          |
| <b>Specific Gravity</b>                        | 1.44   | <b>Freezing Point</b>              | -30°C          |
| <b>Partition coefficient (n-octonal/water)</b> | Not available.                               | <b>Lower Explosive Limit (LEL)</b> | Not Available  |
| <b>pH</b>                                      | Slightly alkaline                            | <b>Upper Explosive Limit (UEL)</b> | Not Available  |
| <b>Flashpoint (Method)</b>                     | Not flammable                                | <b>Auto Ignition temperature</b>   | Not Available  |
| <b>Odour Threshold</b>                         | Not available.                               | <b>Evaporation Rate</b>            | Not available. |
| <b>Flammability (Solid, Gas)</b>               | Not available.                               | <b>Viscosity</b>                   | Not available. |
| <b>Decomposition Temperature</b>               | Not available.                               |                                    |                |

## Section 10 – Stability and Reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | Thermal decomposition generates: Corrosive vapours. |
| <b>Chemical stability</b>                 | Stable under recommended storage conditions.        |
| <b>Possibility of hazardous reactions</b> | No data available.                                  |
| <b>Conditions to avoid</b>                | No data available.                                  |
| <b>Materials to avoid</b>                 | Strong acids. Strong oxidizing agents. Strong bases |
| <b>Hazardous decomposition products</b>   | 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.



# Safety Data Sheet - GHS

## CFR P301

Date of Revision: June 19, 2019

### 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 28.6mg/L      | Fish – Pisces              | 96 Hr |
| Phosphoric acid, 75%, aqueous solution   | LC50 138mg/L       | 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 – Daphnia magna    | 48 Hr |
| Sodium 4(or 5)-methyl-1H-benzotriazolide | LC 50 25mg/L       | 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  |                            |       |
| <b>Persistence and degradability</b>     | Not established.   |                            |       |
| <b>Bioaccumulative potential</b>         | Not established.   |                            |       |
| <b>Mobility in soil</b>                  | No data available. |                            |       |
| <b>PBT and vPvB assessment</b>           | 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.



# Safety Data Sheet - GHS

## CFR P301

Date of Revision: June 19, 2019

### Section 16 – Other Information

#### REVISION SUMMARY:

|                     |               |
|---------------------|---------------|
| Date of Preparation | April 1, 2017 |
| Date of Revision    | June 19, 2019 |

SDS Prepared by: CFR Lab Manager

CFR Chemicals Inc. provides the information contained herein in good faith, but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. CFR Chemicals Inc. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, CFR CHEMICALS INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OR RELIANCE UPON THIS INFORMATION.