



Date of Revision: March 15, 2022

### **Section 1 - Chemical Product and Company Identification**

| Product Name               |
|----------------------------|
| Synonyms                   |
| Product Use                |
| <b>Restrictions On Use</b> |
| Supplier                   |
|                            |

General Assistance Emergency Telephone

**Date of Preparation of SDS** 

StaTherm SRT 60 inhibited TEG 60 Various use, chemical intermediate, heat transfer fluid Not Applicable CFR Chemicals 38451 Range Road 22 County of Red Deer T4E 2N6 1 (877) 269-3419 Not Dangerous Goods – Call General Assistance April 1, 2017

## Section 2 – Hazard Identification

| Signal Word<br>GHS Pictogram(s)<br>Hazard Statement: | Warning<br>None  |
|--|--|
| H316   | Causes mild skin irritation.   |
| H320   | Causes eye irritation.   |
| Precautionary Statement                              | causes eye initiation.   |
| P264   | Wash 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. |
| P332 + P313  | IF SKIN IRRITATION OCCURS: Get medical advice / attention.   |
| P337 + P313  | IF EYE IRRITATION PERSISTS: Get medical advice / attention.  |
| Storage  |  |
| No Statements.                                       |  |
| Disposal   |  |
| P501   | Dispose of contents/container to an approved waste disposal unit.  |
| GHS Classification                                   | Skin irritation (Category 3)   |
|  | Eye irritation (Category 2B)   |
| HMIS Classification                                  | 1  |
| Health Hazard<br>Chronic Health Hazard               | 1  |
| Flammability   | 1  |
| Physical Hazards                                     | 0  |
| riiysicai nazai US                                   | 0  |

## Section 3 – Composition Information on Ingredients

HAZARDOUS INGREDIENT,

Hazardous Ingredient, Synonyms

PERCENT CAS NUMBER





Date of Revision: March 15, 2022

| Common Name                                       |   |           |              |
|---|---|-----------|--------------|
| Triethylene Glycol                                | TEG, 2,2'-(ethylenedioxy)diethanol; TEG; 2,2'-<br>[1,2-ethanediylbis(oxy)]bisethanol; Triglycol | 60%       | 112-27-6     |
| Water   | H <sub>2</sub> O, Aqua  | 35 – 40%  | 7732-18-5    |
| Potassium hydroxide                               | Caustic Potash, Lye   | 0-1%      | 1310-5-3     |
| Phosphoric acid, 75%, aqueous solution            | s Orthophosphoric Acid  | 0-1%      | 7664-38-2    |
| Ethylene Glycol                                   | 1,2-ethanediol, EG, Glycol  | 0-1%      | 107-21-1     |
| Disodium tetraborate,<br>pentahydrate             | Aqua  | 0 - 0.9%  | 12173-04-3   |
| Sodium 4(or 5)-methyl-1H-<br>benzotriazolide      | Not Applicable  | 0 - 0.45% | 64665-57-2   |
| Sodium Nitrite                                    | Not Applicable  | 0 -0.36%  | 7362-00-00   |
| Non-hazardous corrosion inhibitors and pH buffers | Not Applicable  | 0-0.15%   | Trade Secret |
| Polydimethylsiloxane                              | Not Applicable  | 0-0.1%    | 63147-62-9   |
| Silica filled<br>polydimethylsiloxane             | Not Applicable  | 0-0.04%   | 67762-90-7   |
| Sucrose distearate                                | Not Applicable  | 0-0.04%   | 27915-16-0   |
| Chemical Formula                                  | * = Various ** = Mixture *** = Proprietary<br>Not Applicable                                    |           |              |

## 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                 |  |
|  | shows. 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               |  |
| ingeotion  | alert, rinse mouth and drink $\frac{1}{2}$ 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 |  |  |
|  | Harmful if swallowed. Symptoms may include headache, nausea, vomiting May                      |  |
|  | cause slight eye and skin irritation. Symptoms include: Redness, swelling, itching             |  |
|  | and dryness.   |  |





Date of Revision: March 15, 2022

Note to Physician

Consult a physician. Show this safety data sheet to the doctor in attendance.

## Section 5 – Fire-Fighting Measures

| Flash Point (°C)<br>Flash Point Method<br>Auto Ignition Temperature | Not Flammable<br>PMCC<br>347°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<br>Firefighters                             | No data available.  |

## Section 6 – Accidental Release Measures

| Personal precautions        | Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure<br>adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe<br>areas. Beware of vapours accumulating to form explosive concentrations. Vapour<br>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<br>Conditions for safe storage | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.<br>Keep container tightly closed in a dry and well-ventilated place. Containers which<br>are opened must be carefully resealed and kept upright to prevent leakage.<br>Hygroscopic. |  |
|--|---|--|
| Incompatible Materials                                       | Strong Acids, Strong Bases. Strong oxidizing agents.  |  |

## Section 8 – Exposure Controls / Personal Protection

Exposure Limits



|--|--|

## Safety Data Sheet – GHS StaTherm SRT 60%

Date of Revision: March 15, 2022

| Triethylene Glycol                        | ACGIH TLV   |
|---|---|
|   | Ceiling: 50ppm, 127mg/m <sup>3</sup>  |
| Potassium hydroxide                       | Canada, Alberta OHSC Code   |
|   | None established  |
|   | ACGIH   |
|   | Ceiling: 2mg/m <sup>3</sup>   |
| Phosphoric acid, 75%, aqueous solutic     |   |
|   | 1mg/m <sup>3</sup>  |
|   | ACGIH   |
|   | TWA: 1mg/m <sup>3</sup>   |
|   | STEL: 3mg/m <sup>3</sup>  |
|   | OSHA PEL  |
|   | TWA 1mg/m <sup>3</sup>  |
| Ethylene Glycol                           | Canada, Alberta OHSC Code<br>100mg/m <sup>3</sup>                                   |
|   | ACGIH   |
|   | TLV: 100mg/m <sup>3</sup>   |
| Disadium tatraharata, pantahudrata        | Canada, Alberta OHSC Code   |
| Disodium tetraborate, pentahydrate        | TWA: 1mg/m <sup>3</sup>   |
|   | Ceiling: 3mg/m <sup>3</sup>   |
|   | ACGIH   |
|   | TWA: 2mg/m <sup>3</sup>   |
| Sodium 4(or 5)-methyl-1H-benzotriazo      | Dlide Canada, Alberta OHSC Code   |
|   | None established  |
| Sodium Nitrite                            | Canada, Alberta OHSC Code   |
|   | None established  |
|   | ACGIH   |
|   | None Established  |
|   | OSHA  |
|   | None Established  |
| Corrosion Inhibitors and pH Buffers       | Canada, Alberta OHSC Code   |
|   | None established  |
| Polydimethylsiloxane                      | Canada, Alberta OHSC Code<br>None established                                       |
| Cities filled as hading the definition of | Canada, Alberta OHSC Code   |
| Silica filled polydimethylsiloxane        | None established  |
| Sucrose distearate                        | Canada, Alberta OHSC Code   |
| Sucrose disterrate                        | TWA: 10mg/m <sup>3</sup> (Stearates in general)                                     |
| Personal protective equipmen              |   |
| Eye/face protection                       | Chemical safety glasses with side shields to prevent eye contact. As a general rule |
| Lyer lace protection                      |   |
|   | 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         |

**Respiratory protection** 

**General hygiene** Considerations

t lenses when handling chemicals. If contact is possible, the n should be worn: Splash goggles. Safety eyewear complying andard should be used when a risk assessment indicates this d exposure to liquid splashes, mists, gases, or dusts. If exist, a full-face respiratory may be required instead. tant gloves, impermeable protective clothing and safety tective 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. Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary.

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





Date of Revision: March 15, 2022

#### 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                   |
|----------------------------------|
| Appearance & Odour               |
| Vapour Pressure                  |
| Vapour Density                   |
| Specific Gravity                 |
| Partition coefficient (n-        |
| octonal/water)                   |
| рН                               |
| Flashpoint (Method)              |
| Odour Threshold                  |
| Flammability (Solid, Gas)        |
| <b>Decomposition Temperature</b> |
|                                  |

Clear, colourless. Odourless <1 mmHg (20.0°C) (TEG) 5.18(Air = 1) (TEG) 1.07-1.09 Not available. Not available. Not Flammable. Not available. Not available. 203°C

Liquid

|     | Water Solubility            | miscible       |
|-----|-----------------------------|----------------|
| ss. | Boiling Point               | 140°C (15psig) |
|     | Boiling Point Range         | Not applicable |
|     | Melting Point               | -35°C          |
|     | Freezing Point              | -35°C          |
|     | Lower Explosive Limit (LEL) | 0.9% (TEG)     |
|     | Upper Explosive Limit (UEL) | 9.2% (TEG)     |
|     | Auto Ignition temperature   | 347°C (TEG)    |
|     | Evaporation Rate            | Not available. |
|     | Viscosity                   | Not available. |

### Section 10 – Stability and Reactivity

| Reactivity<br>Chemical stability<br>Possibility of hazardous<br>reactions | No specific test data related to reactivity available for this product.<br>Stable under recommended storage conditions.<br>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                    | Mav be harmful if in  | haled. May cause respiratory tract irritation.                   |            |  |  |  |
|-------------------------------|-----------------------|--|------------|--|--|--|
| Skin contact                  | •                     | Harmful if absorbed through the skin. May cause skin irritation. |            |  |  |  |
| Eye contact                   | May cause eye irrita  | May cause eye irritation.  |            |  |  |  |
| Ingestion                     | May cause abdomin     | May cause abdominal discomfort or pain, nausea, vomiting         |            |  |  |  |
| Acute and Chronic Toxici      | ity No data available |  |            |  |  |  |
| Acute toxicity                |                       |  |            |  |  |  |
| Product/Ingredient Name       | Result                | Species  | Dose       |  |  |  |
| Triethylene Glycol            | LD50 Oral             | Rat  | 17000mg/kg |  |  |  |
|                               | LD50 Dermal           | Rabbit   | 22500mg/kg |  |  |  |
| Potassium hydroxide           | LD50 Oral             | Rat  | 333mg/kg   |  |  |  |
| Phosphoric acid, 75%, aqueous | LD50 Oral             | Rat  | 4400mg/kg  |  |  |  |





Date of Revision: March 15, 2022

#### solution

| solution  |                          |   |                            |  |  |  |
|---|--------------------------|---|----------------------------|--|--|--|
| Ethylene Glycol   | LD50 Oral<br>LD50 Dermal | Rat<br>Rabbit   | 4700mg/kg<br>10626mg/kg    |  |  |  |
| Disadium tatraharata  |                          |   |                            |  |  |  |
| Disodium tetraborate,<br>pentahydrate   | LD50 Oral<br>LD50 Dermal | Rat<br>Rabbit   | >2000mg/kg<br>>2000mg/kg   |  |  |  |
|   |                          |   | 640 – 1980mg/kg            |  |  |  |
| Sodium 4(or 5)-methyl-1H-<br>benzotriazolide                                  | LD50 Oral<br>LD50 Dermal | Rat<br>Rabbit   | >2000mg/kg                 |  |  |  |
| Sodium nitrite  | LD50 Oral                | Rat   | 4700mg/kg                  |  |  |  |
|   | EDGO OTAI                | Nat   | 4700Hg/Kg                  |  |  |  |
| Corrosion Inhibitors and pH<br>Buffers  | No data available        |   |                            |  |  |  |
| Polydimethylsiloxane  | No data available        |   |                            |  |  |  |
| Silica filled<br>polydimethylsiloxane   | No data available        |   |                            |  |  |  |
| Sucrose distearate  | No data available        |   |                            |  |  |  |
| Skin corrosion/irritation   | Slightly irritati        | Slightly irritating to skin.  |                            |  |  |  |
| Serious eye damage/ Eye   |                          |   |                            |  |  |  |
|   | Slightly irritati        | ng to the eye.  |                            |  |  |  |
| Respiratory or skin sensiti   | zation                   |   |                            |  |  |  |
|   | No data availa           | ble. Not expected t   | o be a sensitizer.         |  |  |  |
| Mutagenicity  | No known sign            | ificant effects or cr   | itical hazards.            |  |  |  |
| Carcinogenicity   |                          |   |                            |  |  |  |
| IARC:   | No component             | No component of this product present at levels greater than or equal to 0.1% is |                            |  |  |  |
|   | identified as p          | identified as probable, possible or confirmed human carcinogen by IARC.         |                            |  |  |  |
| ACGIH:  | No component             | No component of this product present at levels greater than or equal to 0.1% is |                            |  |  |  |
|   | identified as p          | identified as probable, possible or confirmed human carcinogen by ACGIH.        |                            |  |  |  |
| Reproductive toxicity   | No data availa           | No data available.  |                            |  |  |  |
| Teratogenicity  | No data availa           | No data available.  |                            |  |  |  |
| Specific target organ toxicity - single exposure (Globally Harmonized System) |                          |   |                            |  |  |  |
|   | No data available        |   |                            |  |  |  |
| Specific target organ toxic   | ity - repeated expos     | ure (Globally Harn  | nonized System)            |  |  |  |
|   | No data availa           | ble.  |                            |  |  |  |
| Aspiration hazard   | No data availa           | No data available.  |                            |  |  |  |
| Delayed and Immediate E   | ffects and also Chro     | nic Effects from Sh   | ort 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 availa           | ble   |                            |  |  |  |
|   |                          |   |                            |  |  |  |

## Section 12 – Ecological Information

#### Toxicity

**Product / Ingredient Name** Triethylene Glycol

ResultSpeciesAcute LC50 >100mg/LFish – Leuciscus idus

**Exposure** 96 Hr





Date of Revision: March 15, 2022

| Potassium hydroxide   |                  | Acute EC50 46500mg/L<br>LC50 28.6mgL  | Daphnia – Daphnia magna<br>Fish – Pisces                                       | 24 Hr<br>96 Hr          |  |
|---|------------------|---|--|-------------------------|--|
| Phosphoric acid, 75%, aqueous solution  |                  | LC50 138mgL   | Fish – Pisces  | 96 Hr                   |  |
| Ethylene Glycol   |                  | LC50 18500mg/L<br>LC50 >1000mg/L<br>EC50 74000mg/L  | Fish – Oncorhynchus mykiss<br>Fish – Leuciscus idus<br>Daphnia – Daphnia magna | 96 Hr<br>48 Hr<br>24 Hr |  |
| Disodium tetraborate, pentahydrate  |                  | LC50 100 – 1000mg/L<br>EC50 340mg/L   | Fish – Pisces<br>Daphnia – Dapnhia magna                                       | 96 Hr<br>24 Hr          |  |
| Sodium 4(or 5)-methyl-1H-benzotriazolide  |                  | LC 50 25mgL<br>EC 50 280mg/L  | Fish – Oncorhynchus mykiss<br>Daphnia – Daphnia magna                          | 96 Hr<br>24 Hr          |  |
| Sodium Nitrite  |                  | LC50 0.19mgL  | Fish – Oncorhynchus mykiss   | 96 Hr                   |  |
| Corrosion Inhibitors and pH Buffers   |                  | No data available   |  |                         |  |
| Polydimethylsiloxane  |                  | No data available   |  |                         |  |
| Silica filled polydimethylsiloxane  |                  | No data available   |  |                         |  |
| Sucrose distearate  |                  | No data available   |  |                         |  |
| Persistence and degradability<br>Bioaccumulative potential<br>Mobility in soil<br>PBT and vPvB assessment | No bio<br>No dat | readily biodegradable<br>accumulation is to be expected (log Pow ≤4)<br>a available.<br>a 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 StaTherm SRT 60% Date of Revision: March 15, 2022

## Section 16 – Other Information

REVISION SUMMARY: Date of Preparation April Date of Revision Mare

April 1, 2017 March 15, 2022

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.