

# Low Temperature Heat Transfer Fluid

### **SECTION 1. IDENTIFICATION**

| Product Identifier                  | Low Temperature Heat Transfer Fluid  |
|-------------------------------------|--|
| Other Means of<br>Identification    | 18-308, 18-308-40, 18-308-40, 18-309, 18-309-1000, BULK-18300Y   |
| Recommended Use                     | Please refer to Product label.   |
| <b>Restrictions on Use</b>          | None known.  |
| Manufacturer/Supplier<br>Identifier | Recochem Inc., 850 Montee de Liesse, Montreal, QC, H4T 1P4, Compliance and Regulatory Department, 905-878-5544, www.recochem.com |
| Emergency Phone No.                 | CANUTEC, 613-996-6666, 24 Hours  |
| SDS No.                             | 1679   |

### **SECTION 2. HAZARD IDENTIFICATION**

#### Classification

Eye irritation - Category 2B Label Elements Signal Word: Warning

Hazard Statement(s): H320 Causes eye irritation.

Precautionary Statement(s):Prevention:P264Wash hands and 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.

P337 + P313 If eye irritation persists: Get medical advice/attention.

Storage:

Store in a well ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal:

Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance:

| Chemical Name        | CAS No. | %    | Other Identifiers |
|----------------------|---------|------|-------------------|
| 1,2-Propylene glycol | 57-55-6 | 92.3 |                   |

### **SECTION 4. FIRST-AID MEASURES**

#### **First-aid Measures**

#### Inhalation

Remove source of exposure or move to fresh air. Get medical advice or attention if you feel unwell or are concerned.

#### Skin Contact

Avoid direct contact. Wear chemical protective clothing if necessary. Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. Get medical advice or attention if you feel unwell or are concerned. If skin irritation occurs, get medical advice or attention. Clean clothing, shoes and leather goods.

#### **Eye Contact**

Avoid direct contact. Wear chemical protective gloves if necessary. Quickly and gently blot or brush chemical off the face. Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice or attention.

#### Ingestion

Rinse mouth with water. Get medical advice or attention if you feel unwell or are concerned.

#### Most Important Symptoms and Effects, Acute and Delayed

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

#### **Immediate Medical Attention and Special Treatment**

#### **Target Organs**

Skin.

#### **Special Instructions**

No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

#### Medical Conditions Aggravated by Exposure

Dermatitis.

# **SECTION 5. FIRE-FIGHTING MEASURES**

#### **Extinguishing Media**

#### Suitable Extinguishing Media

Not combustible. Use extinguishing agent suitable for surrounding fire. Use water to keep non-leaking, fire-exposed containers cool.

#### **Unsuitable Extinguishing Media**

None known.

### **Specific Hazards Arising from the Product**

Can ignite if strongly heated. Closed containers may rupture violently when heated releasing contents. Not sensitive to static discharge.

In a fire, the following hazardous materials may be generated: very toxic carbon monoxide, carbon dioxide.

### Special Protective Equipment and Precautions for Fire-fighters

Review Section 6 (Accidental Release Measures) for important information on responding to leaks/spills. See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

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# SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment, and Emergency Procedures

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet.

#### **Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway.

### Methods and Materials for Containment and Cleaning Up

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

# **SECTION 7. HANDLING AND STORAGE**

#### Precautions for Safe Handling

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

#### **Conditions for Safe Storage**

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

|                      | ACGI               | ACGIH TLV®         |                    | OSHA PEL           |          | AIHA WEEL |  |
|----------------------|--------------------|--------------------|--------------------|--------------------|----------|-----------|--|
| Chemical Name        | TWA                | STEL               | TWA                | Ceiling            | 8-hr TWA | TWA       |  |
| 1,2-Propylene glycol | Not<br>established | Not<br>established | Not<br>established | Not<br>established |          |           |  |

#### Appropriate Engineering Controls

General ventilation is usually adequate. For large scale use of this product: provide eyewash in work area, if contact or splash hazard exists.

#### **Individual Protection Measures**

#### **Eye/Face Protection**

Wear chemical safety goggles.

#### Skin Protection

Not required, if used as directed.

#### **Respiratory Protection**

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# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

| <b>Basic Physical and Chemical</b>                  | Properties  |
|---|---|
| Appearance  | Clear yellow viscous liquid.  |
| Odour   | Odourless   |
| Odour Threshold                                     | Not available   |
| рН  | 10 - 11   |
| Melting Point/Freezing Point                        | Not available (melting); Not available (freezing)                                     |
| Initial Boiling Point/Range                         | Not available   |
| Flash Point   | 99 °C (210 °F) (estimated)  |
| Evaporation Rate                                    | 0.01 (n-butyl acetate = 1)  |
| Flammability (solid, gas)                           | Not applicable  |
| Upper/Lower Flammability or<br>Explosive Limit      | 12.5% (estimated) (upper); 2.6% (estimated) (lower)                                   |
| Vapour Pressure                                     | Not available   |
| Vapour Density (air = 1)                            | Not available   |
| Relative Density (water = 1)                        | Not available   |
| Solubility  | Soluble in water; Soluble in all proportions in common organic solvents.              |
| Partition Coefficient,<br>n-Octanol/Water (Log Kow) | Not available   |
| Auto-ignition Temperature                           | 371 °C (700 °F)   |
| Decomposition Temperature                           | Not available   |
| Viscosity   | 54.05 mm2/s at 20 °C (estimated) (kinematic); 56 mPa.s at 20 °C (estimated) (dynamic) |
| Other Information                                   |   |
| Physical State                                      | Liquid  |
| Molecular Weight                                    | Not applicable  |
|   |   |

# **SECTION 10. STABILITY AND REACTIVITY**

| Reactivity   |
|--|
| None known.  |
| Chemical Stability   |
| Normally stable.   |
| Possibility of Hazardous Reactions   |
| None known.  |
| Conditions to Avoid  |
| High temperatures. Temperatures above 99.0 °C (210.2 °F)   |
| Incompatible Materials   |
| Increased risk of fire and explosion on contact with: strong oxidizing agents (e.g. perchloric acid). Not corrosive to metals. |
| Hazardous Decomposition Products   |
| None known.  |
|  |

# SECTION 11. TOXICOLOGICAL INFORMATION

### Likely Routes of Exposure

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### Eye contact.

#### Acute Toxicity

| Chemical Name        | LC50          | LD50 (oral)          | LD50 (dermal)        |
|----------------------|---------------|----------------------|----------------------|
| 1,2-Propylene glycol | Not available | 14800 mg/kg (rabbit) | 20800 mg/kg (rabbit) |

#### LC50: Not applicable.

LD50 (oral): Not applicable.

LD50 (dermal): Not applicable.

#### Skin Corrosion/Irritation

Human experience and animal tests show no or very mild irritation.

#### Serious Eye Damage/Irritation

Human experience and animal tests show mild irritation. Symptoms include sore, red eyes, and tearing.

#### STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

Not harmful based on information for closely related materials.

#### Skin Absorption

Not harmful based on information for closely related materials.

#### Ingestion

Not harmful based on animal tests.

#### **Aspiration Hazard**

Not known to be an aspiration hazard.

### STOT (Specific Target Organ Toxicity) - Repeated Exposure

May cause Following skin contact: at high concentrations dermatitis. Symptoms may include dry, red, cracked skin (dermatitis).

#### Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

### Carcinogenicity

| Chemical Name        | IARC       | ACGIH®         | NTP        | OSHA       |
|----------------------|------------|----------------|------------|------------|
| 1,2-Propylene glycol | Not Listed | Not designated | Not Listed | Not Listed |

#### Reproductive Toxicity

#### Development of Offspring

Does not cause harm to the unborn child.

#### **Sexual Function and Fertility**

Does not cause effects on sexual function or fertility.

#### Effects on or via Lactation

No information was located.

#### **Germ Cell Mutagenicity**

Not known to be a mutagen.

#### Interactive Effects

No information was located.

# **SECTION 12. ECOLOGICAL INFORMATION**

#### Ecotoxicity

### Acute Aquatic Toxicity

| Chemical Name        | LC50 Fish     | EC50 Crustacea         | ErC50 Aquatic<br>Plants | ErC50 Algae |
|----------------------|---------------|------------------------|-------------------------|-------------|
| 1,2-Propylene glycol | Not available | 10000 mg/L             |                         |             |
|                      |               | (Daphnia magna         |                         |             |
|                      |               | (water flea); 48-hour) |                         |             |

### **Chronic Aquatic Toxicity**

| Chemical Name        | NOEC Fish  | EC50 Fish | NOEC Crustacea | EC50 Crustacea |
|----------------------|--|-----------|----------------|----------------|
| 1,2-Propylene glycol | 52930 mg/L<br>(Pimephales<br>promelas (fathead<br>minnow); 96 hrs) |           | Not available  |                |

#### Persistence and Degradability

No information was located.

#### **Bioaccumulative Potential**

No information was located.

#### Mobility in Soil

No information was located.

#### Other Adverse Effects

There is no information available.

# **SECTION 13. DISPOSAL CONSIDERATIONS**

#### **Disposal Methods**

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### **SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

EnvironmentalNot applicableHazardsNot applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

### **SECTION 15. REGULATORY INFORMATION**

Safety, Health and Environmental Regulations

#### Canada

### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

### USA

### Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

### **Custom Regulatory 1**

Consumer Product Safety Improvement Act of 2008 General Conformity Certification

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The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product container.

# **SECTION 16. OTHER INFORMATION**

| SDS Prepared By        | Compliance and Regulatory Department   |
|------------------------|--|
| Phone No.              | 905-878-5544   |
| Date of Preparation    | June 02, 2016  |
| Additional Information | We are committed to uphold the Industry Consumer Ingredient Communication Voluntary Initiative.  |
|                        | Please send us your request by visiting our website at www.recochem.com.   |
|                        | Ingredients present (intentionally added ingredients) at a concentration of greater than one percent (1%) shall be listed in descending order of predominance. Ingredients present at a concentration of not more than one percent shall be listed but may be disclosed without respect to order of predominance.  |
| Disclaimer             | Notice to reader: To the best of our knowledge, the information contained herein is accurate.<br>However, neither the above named supplier nor any of its subsidiaries assumes any liability<br>whatsoever for the accuracy or completeness of the information contained herein. Final<br>determination of suitability of any material is the sole responsibility of the user. All materials<br>may present unknown hazards and should be used with caution. Although certain hazards are<br>described herein, we cannot guarantee that these are the only hazards that exist. |

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