# Safety Data Sheet

acc. to Hazardous Products Regulations (HPR)

# SOLUTHERM(TM) PG FG

Version number: 1.1 Date of compilation: 2025-02-03

## 1 Identification

### 1.1 Product identifier

Trade name **SOLUTHERM(TM) PG FG**

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Heat transfer fluid
Coolant
Professional use
Industrial use

### 1.3 Details of the supplier of the safety data sheet

Recochem Inc.
8725 Holgate Crescent,
Milton Ontario
L9T 5G7
Canada

1-800-361-6030 (Monday-Friday, 9 AM to - 5 PM)
www.recochem.com

### 1.4 Emergency telephone number

Emergency information service

This number is only for transport emergencies.
POISON CONTROL/ANTIPOISON (24 heures/hours):
Alberta 1-800-332-1414 British Columbia 1-800-567-8911 Manitoba 1-855-776-4766 New Brunswick 911 Newfoundland and Labrador 1-866-727-1110 Northwest Territories 1-800-332-1414 Nova Scotia and Prince Edward Island 1-800-565-8161, 1-800-332-1414 or 911.
Nunavut 1-800-268-9017 Ontario 1-800-268-9017 Quebec 1-800-463-5060 Saskatchewan 1-866-454-1212 Yukon Territory 867-393-8700 United States 1-800-222-1222

## 2 Hazard identification

### 2.1 Classification of the substance or mixture

Classification acc. to GHS

This mixture does not meet the criteria for classification.

### 2.2 Label elements

Labeling

not required

### 2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0.1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

## 3 Composition/ Information on ingredients

### 3.1 Substances

Not relevant (mixture)

### 3.2 Mixtures

Description of the mixture

This product does not meet the criteria for classification in any hazard class according to GHS.

**Remarks**

Exact percentage of ingredients is withheld as a trade secret.
*This table, if present, includes all GHS classified ingredients present above their cut-off limits, even if the finished product is not classified as hazardous by GHS.*

## 4 First-aid measures

### 4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

## 5 Fire-fighting measures

### 5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

### 5.2 Special hazards arising from the substance or mixture

none

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

## 6 Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

### 6.2 Environmental precautions

not required

### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## 7 Handling and storage

### 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

### 7.2 Conditions for safe storage, including any incompatibilities

Control of the effects

Protect against external exposure, such as

frost

### 7.3 Specific end use(s)

See section 16 for a general overview.

## 8 Exposure controls/ Personal protection

### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

| Country | Name of agent | CAS No | Identifier | TWA [ppm] | TWA [mg/m³] | STEL [ppm] | STEL [mg/m³] | Ceiling-C [ppm] | Ceiling-C [mg/m³] | Notation | Source |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CA | 1,2-propylene glycol | 57-55-6 | OEL (ON) | | 10 | | | | | aero-sol | Regulation 833 |
| CA | 1,2-propylene glycol | 57-55-6 | OEL (ON) | 50 | 155 | | | | | va | Regulation 833 |

| Notation | |
|---|---|
| aerosol | as aerosols |
| Ceiling-C | ceiling value is a limit value above which exposure should not occur |
| STEL | short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) |
| TWA | time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified |
| va | as vapors and aerosols |

### 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Physical state | liquid |
| Color | colorless - clear |
| Odor | odorless |
| Melting point/freezing point | -51 – -13 °C |
| Boiling point or initial boiling point and boiling range | 102 – 110 °C |
| Flammability | this material is combustible, but will not ignite readily |
| Lower and upper explosion limit | not determined |
| Flash point | >104 °C at 101 kPa |
| Auto-ignition temperature | >400 °C |
| Decomposition temperature | not relevant |
| pH (value) | 9 – 11 (25 °C) |
| Kinematic viscosity | not determined |

Solubility(ies)

| | |
|---|---|
| Water solubility | miscible in any proportion |

Partition coefficient

| | |
|---|---|
| Partition coefficient n-octanol/water (log value) | this information is not available |

| | |
|---|---|
| Vapor pressure | <0.1 mmHg at 25 °C |

Density and/or relative density

| | |
|---|---|
| Density | 1 – 1.1 $^{g}/_{cm^3}$ |
| Relative vapour density | information on this property is not available |

| | |
|---|---|
| Particle characteristics | not relevant (liquid) |

### 9.2 Other information

| | |
|---|---|
| Information with regard to physical hazard classes | hazard classes acc. to GHS (physical hazards): not relevant |

Other safety characteristics

| | |
|---|---|
| Miscibility | Completely miscible with water. |
| Temperature class (USA, acc. to NEC 500) | T2 (maximum permissible surface temperature on the equipment: 300°C) |

## 10 Stability and reactivity

### 10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

Oxidizers

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## 11 Toxicological information

### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Classification acc. to GHS**

This mixture does not meet the criteria for classification.

Acute toxicity

Shall not be classified as acutely toxic.
GHS of the United Nations, annex 4: May be harmful in contact with skin.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

## 12 Ecological information

### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

### 12.2 Persistence and degradability

Data are not available.

### 12.3 Bioaccumulative potential

Data are not available.

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0.1%.

### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0.1%.

### 12.7 Other adverse effects

Data are not available.

## 13 Disposal considerations

### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

**Remarks**

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## 14 Transport information

| | | |
|---|---|---|
| **14.1** | **UN number** | not subject to transport regulations |
| **14.2** | **UN proper shipping name** | not relevant |
| **14.3** | **Transport hazard class(es)** | none |
| **14.4** | **Packing group** | not assigned |
| **14.5** | **Environmental hazards** | non-environmentally hazardous acc. to the dangerous goods regulations |

### 14.6 Special precautions for user

There is no additional information.

### 14.7 Transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

**Information for each of the UN Model Regulations**

**Transport information - National regulations - Additional information (UN RTDG)**

Not subject to transport regulations: UN RTDG

**International Maritime Dangerous Goods Code (IMDG)**

Not subject to IMDG.

**International Civil Aviation Organization (ICAO-IATA/DGR)**

Not subject to ICAO-IATA.

## 15 Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

**National regulations (United States)**

**Toxic Substance Control Act (TSCA)** all ingredients are listed

**Superfund Amendment and Reauthorization Act (SARA TITLE III )**

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed

### Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

none of the ingredients are listed

### Clean Air Act

none of the ingredients are listed

### Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

| Name of substance | CAS No | Functionality | Authoritative Lists |
|---|---|---|---|
| propylene glycol | 57-55-6 | humectant | |
| Water | 7732-18-5 | solvent | |

- Toxic or Hazardous Substance List (MA-TURA)

none of the ingredients are listed

### California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

### VOC content

- Regulated Volatile Organic Compounds (VOC-EPA) 0 %
- Regulated Volatile Organic Compounds (VOC-Cal ARB) 0 %

### Industry or sector specific available guidance(s)

### NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

| Category | Rating | Description |
|---|---|---|
| Chronic | / | none |
| Health | 0 | no significant risk to health |
| Flammability | 1 | material that must be preheated before ignition can occur |
| Physical hazard | 0 | material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive |
| Personal protection | - | |

| | |
|---|---|
| Chronic: | chronic hazard |
| Flammability: | flammability hazards |
| Health: | health hazard |
| Personal protection: | personal protective equipment (PPE) for normal use |
| Physical hazard: | reactivity |

### NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

| Category | Degree of hazard | Description |
|---|---|---|
| Flammability | 1 | material that must be preheated before ignition can occur |
| Health | 0 | material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material |

| Category | Degree of hazard | Description |
|---|---|---|
| Instability | 0 | material that is normally stable, even under fire conditions |
| Special hazard | | |

## National regulations (Canada)

Domestic Substances List (DSL)

All ingredients are listed.

## National inventories

| Country | Inventory | Status |
|---|---|---|
| AU | AIIC | all ingredients are listed |
| CA | DSL | all ingredients are listed |
| CN | IECSC | all ingredients are listed |
| EU | ECSI | all ingredients are listed |
| EU | REACH Reg. | all ingredients are listed |
| JP | CSCL-ENCS | all ingredients are listed |
| JP | ISHA-ENCS | not all ingredients are listed |
| KR | KECI | all ingredients are listed |
| MX | INSQ | all ingredients are listed |
| NZ | NZIoC | all ingredients are listed |
| PH | PICCS | all ingredients are listed |
| TR | CICR | not all ingredients are listed |
| TW | TCSI | all ingredients are listed |
| US | TSCA | all ingredients are listed (ACTIVE) |

Legend

| | |
|---|---|
| AIIC | Australian Inventory of Industrial Chemicals |
| CICR | Chemical Inventory and Control Regulation |
| CSCL-ENCS | List of Existing and New Chemical Substances (CSCL-ENCS) |
| DSL | Domestic Substances List (DSL) |
| ECSI | EC Substance Inventory (EINECS, ELINCS, NLP) |
| IECSC | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ | National Inventory of Chemical Substances |
| ISHA-ENCS | Inventory of Existing and New Chemical Substances (ISHA-ENCS) |
| KECI | Korea Existing Chemicals Inventory |
| NZIoC | New Zealand Inventory of Chemicals |
| PICCS | Philippine Inventory of Chemicals and Chemical Substances (PICCS) |
| REACH Reg. | REACH registered substances |
| TCSI | Taiwan Chemical Substance Inventory |
| TSCA | Toxic Substance Control Act |

### Additional information

The contained substances are listed in the following national inventories:
AICiS (Australia)
DSL/NDSL (Canada)
IECSC (China)
EINECS/ELINCS/NLP (Europe)
CSCL-ENCS (Japan)
KECL (Republic of Korea)
INSQ (Mexico)
NZIoC (New Zealand)
PICCS (Philippines)
TCSI (Taiwan)
TSCA (United States)

## 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## 16 Other information

### Indication of changes (revised safety data sheet)

Alignment to regulation: Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").
Restructuring: section 9, section 14

### Abbreviations and acronyms

| Abbr. | Descriptions of used abbreviations |
|---|---|
| Cal ARB | California Air Resources Board |
| CAS | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances) |
| Ceiling-C | Ceiling value |
| DGR | Dangerous Goods Regulations (see IATA/DGR) |
| ED | Endocrine disruptor |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EPA | Environmental Protection Agency. An agency of the federal government of the United States charged with protecting human health and the environment |
| GHS | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations |
| IATA | International Air Transport Association |
| IATA/DGR | Dangerous Goods Regulations (DGR) for the air transport (IATA) |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods Code |
| NLP | No-Longer Polymer |
| NPCA-HMIS® III | National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition |
| PBT | Persistent, Bioaccumulative and Toxic |
| ppm | Parts per million |
| Regulation 833 | R.R.O. 1990, Reg. 833: Control of exposure to biological or chemical agents (Ontario) |
| STEL | Short-term exposure limit |
| TWA | Time-weighted average |
| UN RTDG | UN Recommendations on the Transport of Dangerous Good |

| Abbr. | Descriptions of used abbreviations |
|---|---|
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and very Bioaccumulative |

## Key literature references and sources for data

Hazardous Products Regulations (HPR)
SOR/2022-272: Regulations Amending the Hazardous Products Regulations (GHS, Seventh Revised Edition)
UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

## Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

## Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.