



SAFETY DATA SHEET

PURITY: FG HEAT TRANSFER FLUID

Version: 01/NZ 10112032

Revision: 02.

Printing Date: 10th November 2025

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND COMPANY/UNDERTAKING

1.1 Product Identifier

Global Product Name:

PURITY: FG HEAT TRANSFER FLUID

Product Identification Number:

PFHTFBLK, PFHTFP20, PFHTFIBC, PFHTFDRX, PFHTF

1.2 Relevant Identified Uses and Uses Advised Against

Identified Uses: Purity FG Heat Transfer Fluid is a heat transfer fluid for non-pressurised, liquid-phase, closed heat transfer systems. NSF H1 Registered.

All components comply with FDA 21 CFR 178.3570 "Lubricants with Incidental Food Contact". It is intended for application on industrial and food equipment. It should not be added directly to the food product.

1.3 New Zealand Supplier Details

Company: Euromarc Industries Limited
Address 203 Glover Road
Hawera 4610
New Zealand
Telephone: +0800 278600

Manufacturer Details

Petro-Canada Lubricants Inc
2310 Lakeshore Road West
Mississauga ON L5J 1K2
Canada
1-905-403-6785

1.4 Emergency Contact Details

Telephone: 0800-278600 (Mon to Friday – 7 am to 5 pm)

Fire and Emergency: Dial 111

National Poisons Centre: 0800 764766 (0800 Poison) 24-hour freephone

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance/Mixture

Mixture:

Classification as per NZ EPA Guide to classifying hazardous substances - New Zealand (GHS7)

Classification: Non-Hazardous

Hazard Class and Hazard Category	Hazard Statement
Non-Hazardous	Not applicable

2.2 Label Elements

2.2.1 According to the New Zealand EPA “Hazardous Substances (Labelling) Notice 2017”

Symbol: Not applicable

Signal Word: Not applicable

Hazard Statements:

Hazard Statement Code	Hazard Statement
Not applicable	Non-hazardous - GHS

Precautionary, Response and Disposal Statements:

Category	Precautionary Statements	
General	Not applicable	Non-hazardous - GHS
Prevention	Not applicable	Non-hazardous - GHS
Response	Not applicable	Non-hazardous - GHS
Storage	Not applicable	Non-hazardous - GHS
Disposal	Not applicable	Non-hazardous - GHS

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Mixture: PURITY: FG TROLLEY FLUID 46

Ingredient	CAS Number	% by Weight
White mineral oil (petroleum)	8042-47-5	90 - 100

All other ingredients are noted as non-hazardous and will not affect the classification

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove the victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in the recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Do not leave the affected person unattended.

Inhalation:

Remove person to fresh air.

Artificial respiration and/or oxygen may be necessary

Get medical attention.

Skin Contact:

Wash with plenty of soap and water for at least 15 minutes.

If you feel unwell, get medical attention.

Eye Contact:

Flush with large amounts of water.

Remove contact lenses if easy to do and continue rinsing.

If signs/symptoms persist, get medical attention.

Ingestion:

Rinse mouth. If you feel unwell.

DO NOT induce vomiting unless directed to do so by a physician or poison control centre.

Never give anything by mouth to an unconscious person.

Seek medical advice.

Most important symptoms and effects, both acute and delayed

No critical symptoms or effects.

First aider needs to protect himself

Indication of any immediate medical attention and special treatment needed

Treat symptomatically

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Utilise a powder fire extinguisher or carbon dioxide. (minimum rating 30B)

Unsuitable extinguishing media:

No information available

5.2 Special Hazards Associated with the Substance or Mixture

Cool closed containers exposed to fire with water spray

Hazardous Decomposition or By-Products

Carbon oxides (CO, CO₂), silicon oxides (SiO_x), smoke and irritating vapours as products of incomplete combustion.

5.3 Special Protective Equipment and Precautions for Fire-Fighters

Prevent fire extinguishing water from contaminating surface water or the groundwater system.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures

- Use personal protective equipment.
- Ensure adequate ventilation.
- Evacuate personnel to safe areas.
- Material can create slippery conditions.
- Mark the contaminated area with signs and prevent access to unauthorised personnel.
- Only qualified personnel equipped with suitable protective equipment may intervene.

6.2 Environmental Precautions

No specific information is available. (Cover drains where possible)

6.3 Methods and Materials for Containment and Cleanup

- Prevent further leakage or spillage if safe to do so.
- Remove all sources of ignition.
- Soak up with inert absorbent material.
- Non-sparking tools should be used.
- Ensure adequate ventilation.
- Contact the proper local authorities.

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

For personal protection see section 8.

- Smoking, eating and drinking should be prohibited in the application area.
- Use only with adequate ventilation.
- In case of insufficient ventilation, wear suitable respiratory equipment.
- Avoid contact with skin, eyes and clothing.
- Do not ingest.

- Keep away from heat and sources of ignition.
- Keep the container closed when not in use.

7.2 Fire prevention measures:

- Keep away from sources of heat (e.g., hot surfaces), sparks, and open flames.

7.3 Conditions for Safe Storage, Including Incompatibilities

- Store in original container.
- Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Keep in a dry, cool and well-ventilated place.
- Keep in properly labelled containers.
- To maintain product quality, do not store in heat or direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Occupational Exposure Limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Components	CAS-No.	Value type	Control parameters / Permissible concentration	Basis
White mineral oil (petroleum)	8042-47-5	TWA (Mist)	5 mg/m ³	CA AB OEL
		STEL (Mist)	10 mg/m ³	CA AB OEL
		TWAEV (Mist - Inhalable dust)	5 mg/m ³	CA QC OEL
		TWA (Mist)	1 mg/m ³	CA BC OEL
		TWA (Inhalable particulate matter)	5 mg/m ³	ACGIH

New Zealand WES : New Zealand Workplace Exposure Standards.

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

ppm: parts per million

mg/m³: milligrams per cubic metre

CEIL: Ceiling

8.2 Exposure Controls/ Engineering controls

No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

8.3 Personal Protective Equipment

Eye and Face Protection:

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Indirect vented goggles.

Refer AS/NZS 1336 - Recommended practices for occupational eye protection and for performance specifications AS/NZS 1337, Parts 1 - 6 - Personal eye-protection.

Respiratory Protection:

An exposure assessment may be needed to decide if a respirator is required in some circumstances. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece supplied-air respirator.

For questions about suitability for a specific application, consult with your respirator manufacturer.

Refer AS/NZS 1715 - Selection, use and maintenance of respiratory protective equipment and AS/NZS 1716 – Respiratory protective devices. (organic vapour filter)

Skin Protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Property	Value	Additional Details
Physical State	viscous liquid	
Specific Physical Form	Liquid	
Colour	Clear, slightly yellow.	
Odour	Vegetable oil.	
Odour Threshold	No data available	
pH	Not applicable	
Pour point	-18 °C (-0.40 °F) Base Fluid Blend	
Boiling Point / Initial Boiling Point / Boiling Range	Not applicable	
Flash Point	212 °C (414 °F)	Test Method: Pensky-Martens closed cup
Evaporation Rate	No data available	

Property	Value	Additional Details
Flammability (solid, gas, liquid)	Not applicable	Remarks: Low fire hazard. This material must be heated before ignition will occur.
Flammable Limits (LEL)	No data available	
No data available	No data available	
Vapor Pressure	No data available	
Vapor Density / Relative Vapor Density	No data available	
Relative Density	0.8681 kg/l (15 °C)	
Water Solubility	insoluble	
Partition Coefficient: n-octanol/water	No data available	
Autoignition Temperature	354 °C	
Decomposition Temperature	No data available	
Viscosity / Kinematic Viscosity	37.1 cSt (40 °C) 5.9 cSt (100 °C)	
No data	No data available	Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Particle size	No data available	

10. STABILITY AND REACTIVITY

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical Stability

The product is stable under storage at normal ambient temperatures.

10.3 Possibility of Hazardous Reactions

Hazardous polymerisation will not occur.

10.4 Conditions to Avoid

Heat.

Sparks and/or flames.

10.5 Incompatible Materials

Avoid contact with strong acids and oxidizers

10.6 Hazardous Decomposition Products

May release CO_x, NO_x, SO_x, methacrylate monomers, formaldehyde, smoke and irritating vapours when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Routes of Exposure - Signs and Symptoms of Exposure

Inhalation

Simple asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

Contact with the skin during product use is not expected to result in significant irritation.

Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

Additional Health Effects:

None known:

Components

Components	Type of Toxicity	Value
White mineral oil (petroleum)	Acute oral toxicity	LD50 (Rat): > 5,000 mg/kg
	Acute inhalation toxicity	LC50 (Rat): > 5.2 mg/l
	Exposure time	4 h
	Test atmosphere	dust/mist
	Acute dermal toxicity	LD50 (Rabbit): > 2,000 mg/kg

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Not classified due to lack of data.

Skin Corrosion/ Irritation	Not classified due to lack of data.
Serious Eye Damage/Irritation	Not classified due to lack of data.
Skin Sensitisation	Not classified due to lack of data.
Photosensitisation	Not classified due to lack of data.
Respiratory Sensitisation	Not classified due to lack of data.
Germ Cell Mutagenicity	Not classified due to lack of data.
Carcinogenicity	Not classified due to lack of data.
Reproductive Toxicity	Possible reproductive and/or Developmental Effects
STOT – single exp)	Not classified due to lack of data.
STOT - repeated exposure	Not classified due to lack of data.
Aspiration Hazard	Not classified due to lack of data.

12. ECOLOGICAL INFORMATION

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1 Toxicity

No product test data available.

Product:

Toxicity to fish	: Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates	: Remarks: No data available
Toxicity to algae/aquatic plants	: Remarks: No data available
Toxicity to microorganisms	: Remarks: No data available

12.2 Persistence and Degradability

Biodegradability	: Remarks: No data available
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12.3 Bioaccumulative Potential

Bioaccumulative potential	: Remarks: No data available
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12.4 Mobility in Soil

Mobility in soil	: Remarks: No data available
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12.5 Other adverse effects

:No information available.

13. DISPOSAL CONSIDERATIONS

13.1 Disposal Instructions

Dispose in accordance with the Hazardous Substances (Disposal) Notice 2017 and the relevant criteria of the HSNO Act 1996.

Dispose of waste product in a permitted industrial waste facility.

Dispose of product residue in accordance with the instructions of the person responsible for waste disposal

14. TRANSPORT INFORMATION

Description	Details: (Road Transport) SNZ HB NZS5433:2021
UN Number	Not regulated
Proper Shipping Name	Not regulated
Dangerous Goods Class	Not regulated
Packing Group	Not regulated
Marine Pollutant	Not regulated
Hazchem Code	Not regulated
Excepted Quantities (EQ)	Not regulated
Limited Quantities	Not regulated
Special Provisions	Not regulated

Please be advised that complete adherence to the NZS5433:2021 standard is mandatory, including all necessary documentation for dangerous goods, as well as proper packaging, labelling, and marking when transporting this product by land.

Description	Details: (Sea Transport) IMDG Code – Vol 2
UN Number	Not regulated

Description	Details: (Sea Transport) IMDG Code – Vol 2
Proper Shipping Name	Not regulated
Dangerous Goods Class	Not regulated
Packing Group	Not regulated
Marine Pollutant	Not regulated
EmS	Not regulated
Excepted Quantities (EQ)	Not regulated
Limited Quantities	Not regulated
Special Provisions	Not regulated

Please be advised that complete adherence to the International Marine Dangerous Goods Code is mandatory, including all necessary documentation for dangerous goods, as well as proper packaging, labelling, and marking when transporting this product by Sea.

Description	Details: (Air Transport) IATA
UN Number	Not regulated
Proper Shipping Name	Not regulated
Dangerous Goods Class	Not regulated
Packing Group	Not regulated
Marine Pollutant	Not regulated
Excepted Quantities (EQ)	Not regulated
ERG code	Not regulated
Limited Quantities	Not regulated
Special Provisions	Not regulated

Please be advised that complete adherence to the International Air Transport Regulations is mandatory, including all necessary documentation for dangerous goods, as well as proper packaging, labelling, and marking when transporting this product by Air.

15. REGULATORY INFORMATION

HSNO Approval Code / Group Standard:

HSNO Approval number:

Not applicable (Non-hazardous)

EPA - New Zealand Inventory of Chemicals:

All ingredients are listed and approved.

Label Elements

According to New Zealand EPA's "Hazardous Substances (Labelling) Notice 2017.

Other regulations:

Controls in accordance with The Health and Safety at Work Act 2015, Health and Safety at Work (Hazardous Substances) Regulations 2017 and the HSNO Act 1996, Hazardous Substances (Hazardous Property Controls) Notice 2017

Health and Safety at Work (Hazardous Substances) Regulations 2015

Key Controls:

Compliance Category	HSWA Control / Requirement
Location Compliance Certification	Not applicable
Certified Handler Qualifications	Not applicable
Regulation 4.5 Training	Not applicable
Fire Extinguishers	Not applicable
Hazardous Area Atmosphere Zoning	Not applicable
Hazchem Signage	Not applicable
Chemical Inventory	Triggered (any quantity)
Emergency Management	Not applicable
Tracking	Not applicable
Securing from unauthorised access	Not applicable

Disclaimer:

All controls must be fully adhered to per the Health and Safety at Work Act (Hazardous Substances) Regulations. (HSWA) Compliance is essential to ensure the health and safety of all individuals in the workplace.

16. OTHER INFORMATION

Date of Preparation or Last Revision: 10th November 2025 (To meet NZ EPA Standards)

Prepared by: Environmental Resources Limited

Abbreviations and Acronyms:

Abbreviation	Meaning
Approval #	The HSNO (Hazardous Substances and New Organisms) approval number is a unique identifier assigned to hazardous substances that have been assessed and approved for use under the HSNO Act in New Zealand
CAS	Chemical Abstracts Service (division of the American Chemical Society)
EPA	Environmental Protection Authority of New Zealand
IMDG	International Maritime Code for Dangerous Goods
IATA	International Air Transport Association
GHS	Globally Harmonised System of Classification and Labelling of Chemicals (GHS7)
HSNO	Hazardous Substances and New Organisms Act 1996
LC50	Lethal Concentration, 50 percent
LD50	Lethal Dose, 50 percent
IARC	International Agency for Research on Cancer
STEL	Short-Term Exposure Limit
TWA	Time Weighted Average
WES	Workplace Exposure Standard

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