

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Identifiers

Product name: Thermal-Guard FG Heat Transfer Fluid

Product Number: 0235

Chemical Name & Synonyms: Inhibited Propylene Glycol, USP Grade

Product Application: Heat Transfer Fluid where food contact is possible

Emergency telephone number: CHEMTREC (800) 424-9300 Poison Control: 1-800-222-1222

SECTION 2 – HAZARD IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Signal Word: None

Pictograms: None

Physical Hazards: None

Health Hazards: None

Eye Damage/Irritation None

Environmental Hazards: None known

Precautionary Statements

Prevention: Wash thoroughly after handling. Wear protective gloves or clothing. Wear eye or face protection. Avoid release to the environment.

Response: If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Wash contaminated clothing before reuse.

Storage: No special precautions.

Disposal: Contain Spillage.

HNOC: HMIS Rating: Health hazard: 0 Chronic Health Hazard: Flammability: 0 Physical Hazard 0

NFPA Rating: Health hazard: 0 Fire Hazard: 0 Reactivity Hazard: 0

* Hazards not otherwise classified (HNOC) or not covered by GHS.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS	Wt%
Propylene Glycol (FG)	57-55-6	94-98%
Dipotassium Phosphate (FG)	7758-11-4	2-4%

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of contaminated area.

If inhaled:

P304/P312 IF INHALED: Call a POISON CENTER or physician if you feel unwell.

Skin contact:

P353 Rinse skin with water/shower

P332 If skin irritation occurs: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water.

P363 Wash contaminated clothing before reuse.

Eye contact:

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.

If swallowed:

P301/P330/P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P314 Get Medical advice/attention if you feel unwell

Most important symptoms and effects, both acute and delayed: Treat symptomatically.

Indication of any immediate medical attention and special treatment needed: None known.

SECTION 5 – FIREFIGHTING MEASURES

Flammable Properties: Non-Flammable

Explosive Properties: N/A

Suitable Extinguishing media: N/A

Unsuitable extinguishing media: N/A

Special hazards arising from the substance or mixture: Overheating in fire conditions may produce oxides of carbon, phosphorus, and potassium.

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA Fire Brigades Standard (29 CFR 1910.156).

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Wear respiratory protection. Avoid dust formation. Avoid breathing vapor, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see Section 8.

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: Keep in suitable, closed containers for disposal.

Reference to other sections: For disposal see Section 13.

Product is water soluble and may be diluted and flushed as below described.

Other Information: This product is intended to be used in the treatment of hydronic water loops, and discharged to sanitary sewer in its working concentration. Concentrated product may be diluted to a similar working concentration and flushed to sewer, or soaked up with absorbent material and landfilled in accordance with local, state, and federal regulations.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin and eyes. Avoid formation of aerosols. Provide appropriate exhaust ventilation. For precautions see Section 2.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place.

SECTION 8 – EXPOSURE CONTROL AND PERSONAL PROTECTION

Control parameters

Components with workplace control parameters: None

Exposure controls

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:

Eye/face protection: Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls.

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear viscous liquid with slight organic odor

pH: 9.94

Specific Gravity: 1.056

Molecular Weight: Mixture

Water Solubility: Completely Miscible

Melt/Freeze Point: -59 C / -74.2 F

Boiling Point: 188 C / 370 F

Flammability: Not Flammable

Flash Point: N/A

Vapor Density: NA

Note: Physical Data is typical values based on material tested, but may vary based on composition. Values should not be accepted as guaranteed for every lot or as specifications for this product.

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: No data available

Chemical stability: Stable under normal conditions of use and storage

Possibility of hazardous reactions: No data available

Conditions to avoid: None known

Incompatible materials: No data available

Hazardous decomposition products: None known.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on toxicological effects: Acute toxicity LD50 Oral - Rat - >20,000 mg/kg.

Inhalation: No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity: IARC, ACGIH, NTP, and OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

Additional Information: None.

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity: Non-toxic.

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: No data available. Product is water soluble, so will likely move within the aquifer.

Other adverse effects: Harmful to aquatic life.

SECTION 13 – DISPOSAL CONSIDERATION

Waste treatment methods:

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

This product is intended to be used in the treatment of hydronic water loops, and discharged to sanitary sewer in its working concentration. Concentrated product may be diluted to a similar working concentration and flushed to sewer, or soaked up with absorbent material and landfilled in accordance with local, state, and federal regulations.

SECTION 14 – TRANSPORT INFORMATION (USDOT)

Proper shipping Name: Inhibited Propylene Glycol

Hazard Class: Non-Hazardous

UN/ID No None

Packing Group None

Reportable Quantity (RQ) None

Description: N/A

SECTION 15 – REGULATORY INFORMATION

TSCA (Toxic Substance Control Act): Not regulated.

CERCLA: (Comprehensive Emergency Response Compensation, and Liability Act): Product is not found in “List of Hazardous Substances and Reportable Quantities” (40 CFR 302.4)

RCRA: (Resource Conservation/Recovery Act): Not regulated

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Not regulated

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16 – OTHER INFORMATION

Fire Protection Association (NFPA) Ratings:



NSF Certification: N/A

This Safety Data Sheet compiled from information provided by the raw chemical product manufacturers.

Disclaimer: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, from failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.