

# PG FG LEED Heat Transfer Fluid Technical Data Sheet

#### **Product Overview**

Virgin bio-based propylene glycol heat transfer fluid containing a specially designed inhibitor package that helps prevent corrosion. **SOLUTHERM™ PG FG LEED** is registered by NSF as an HT-1 product. The fluid is manufactured with ingredients classified as Generally Recognized as Safe (GRAS) by the FDA, for use in food and beverage manufacturing facilities where incidental food contact is possible. **PG FG LEED** is a USDA Certified Biobased product made with renewable materials and provides burst protection to -50°F when the concentration is 35% or higher.

#### **Product Technical Information**

**SOLUTHERM™ PG FG LEED** inhibited virgin bio-based propylene glycol heat transfer fluid is manufactured with the highest quality raw materials. Each fluid is specially formulated with state-of-the-art inhibitor chemistry that prevents corrosion, which minimizes fluid expense and extends fluid life. **SOLUTHERM™** fluid is silicate-free and meets ASTM standards for corrosion protection and bio-based content; and is available in dilutions ranging from 30% to 70% PG. Please note that we recommend diluting only with RO (reverse osmosis) or distilled water to maintain corrosion protection.

#### Performance, Features and Benefits

- Excellent low temp pumpability Product
- Fluid is undyed and near colorless
- Silicate free
- Meets the Heat Transfer Fluid ASTM D8039 corrosion specification, ensuring multi-metal protection when a minimum of 30% is used
- Lower environmental toxicity vs EG
- Potential LEED Innovation credits
- Renewable, sustainable bio-based product
- Significant reduction in GHG













#### **Product Use**

**SOLUTHERM™ PG FG LEED** is intended for use in Food & Beverage processing applications where a bio-based propylene glycol coolant is required. Before initial fill with **PG FG LEED**, the system should be prepared by an appropriate flushing procedure followed by complete removal of flushing fluid.

Once filled, it is natural for **PG FG LEED** thermal management fluid inhibitor levels to slowly depreciate over time. The fluid may be maintained in the system for up to 10 years with proper fluid monitoring and addition of recommended boosters and treat rates provided by our fluid analysis program.

## **Storage and Disposal**

Store **SOLUTHERM™ PG FG LEED** in original container in a cool, dry environment away from direct sunlight. When properly stored, the product is suitable for use for up to 2 years after manufacture. Do not use galvanized steel for storage or handling systems. Refer to SDS for product safety information. Discard unused or end of life product in accordance with local, regional, or national regulations.

### **Specifications:**

The corrosion inhibitor package in **SOLUTHERM™ PG FG LEED** Heat Transfer Fluid is designed to meet and exceed corrosion protection via the following Classification and Specifications:

- ASTM D8039
- ASTM D6866
- USDA BioPreferred®
- GRAS by FDA



#### **PRODUCT OFFERING INCLUDES:**

TYPICAL PROPERTIES	SOLUTHERM™ PG FG LEED Concentrate	SOLUTHERM™ PG FG LEED 70	SOLUTHERM™ PG FG LEED 60	SOLUTHERM™ PG FG LEED 50	SOLUTHERM™ PG FG LEED 40	SOLUTHERM™ PG FG LEED 30
Propylene Glycol % Weight	95%	70%	60%	50%	40%	30%
Corrosion Inhibitors and Water % Weight	5%	30%	40%	50%	60%	70%
Color	Clear					
ASTM Corrosion Specification	D8039					
pH of Solution	Depending on Dilution	9.0-10.8	9.0-10.8	9.0-10.8	9.0-10.8	9.0-10.8
Reserve Alkalinity, mL	10.6 min	7.6 min	6.5 min	5.4 min	4.3 min	3.3 min
Pounds per Gallon (68°F)	8.79	8.81	8.78	8.74	8.68	8.60
Boiling Point	Depending on Dilution	230°F (110°C)	225°F (107°C)	222°F (106°C)	219°F (104°C)	216°F (102°C)
Freezing Point	Depending on Dilution	Below -60°F (-51.1°C)	<-60°F (<-51.1°C)	-28°F (-33.6°C)	-7°F (-21.4°C)	9°F (-13.0°C)



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