

# PRODUCT DATA SHEET

# NemFrost PG HTF Heat Transfer Fluid

## Description

**NemFrost PG HTF** is an inhibited propylene glycolbased heat transfer fluid for heating and secondary cooling applications for which a low toxicity heat transfer fluid is required. Applications include freeze and burst protection for pipes, ice-making, defrosting, de-icing, and dehumidifying. It is also registered with the NSF for use where there is the possibility of incidental food or beverage contact (HT1).

Formulated to control degradation while providing corrosion protection and pH stability, NemFrost PG HTF meets ASTM D3306 performance requirements for the D1384 corrosion test demonstrating excellent protection to all cooling system metals. Dilutions below 65% by volume meet ASTM D8039 requirements for use in heat transfer applications and HVAC systems. Product is in concentrate form and must be diluted prior to use.

#### **Advantages**

- Excellent low-temperature performance and pumpability
- Superior resistance to fouling and corrosion
- Low toxicity means suitable for food, beverage, pharmaceutical, and consumer industries
- Low hazard rating and is non-flammable
- Available in concentrate and premix 50:50
- Operating range -45°C 120°C

## **OEM Approval**

• Rinnai<sup>®</sup> Condensing Gas Boilers (including I-Series, M-Series, E-Series, Q-Series, and QP-Series) used with hydronic plumbing systems

Rinnai<sup>®</sup> Technical Bulletin 63(04) 4/2022. Refer to the boiler's Installation and Operation Manual for specific glycol percentage permitted in the installation.

#### **Applications**

- Closed-loop water based HVAC
- Solar heating systems
- Cooling towers and chillers
- Food and beverage
- Fire sprinkler systems
- Ground source heat pumps
- Ice-making & skating rink systems
- Irrigation systems
- Refrigeration and freezing
- Trace line insulation & heating
- Water bath heaters

#### Use and Storage

Typical HTF shelf life is five years under ideal storage conditions; keep containers in good condition, away from direct sunlight, and store between 15°C - 20°C.

		Performance		
Properties	Method	Concentrate	Prediluted 50:50	
Colour / Odour	-	Fluorescent Yellow / Mild		
SPG, @15.6°C	Internal	1.050 - 1.060	1.030 - 1.040	
рН	Internal	9 - 10	9 – 10	
Freeze point, °C(F)	ASTM D3321	n/a	-33 (-28)	
Burst point, °C(F)	Industry	n/a	-51 (-60)	
Boiling point, °C(F)	ASTM D3321	154 (310)	106 (222)	
Glycol Content, %	Refractometer	≥96	≥50	

These characteristics are typical of current production, variations in these characteristics may occur.

NemFrost P	G HTF	Issue Date	e: 09/01/21	Revision Date	e: 11/09/22	Rev#: 1.1	Page 1 of 2	
NEMCO	25 Midland Street	Winnipeg, Manitoba	Canada	R3E 3J6	TF 1-855	5-755-6737	nemco.ca	

# **Typical Characteristics - NemFrost**

Temp	Ratio to	o Water	Temp	Ratio to	o Water
°C (°F)	Freeze	Burst	°C (°F)	Freeze	Burst
-7 (20)	18:82	12:88	-34 (-30)	50:50	33:67
-12 (10)	29:71	20:80	-40 (-40)	54:46	35:65
-18 (0)	36:64	24:76	-46 (-50)	57:43	35:65
-23 (-10)	42:58	28:72	-60 (-51)	60:40	35:65
-29 (-20)	46:54	30:70			

# **Availability and product codes**

Pack size	20L pail	205L drum	1,000 tote/Bulk	
NemFrost Conc.	AIAFZ0096	AIAFZ0097	AIAFZ0098	
NemFrost 50/50	AIAFZ0099	AIAFZ0100	Special Order	
Availability	To order, contact us toll free 855-755-6737 or at orderdesk@nemco.ca			

# Health, Safety, & Environment

GHS compliant Safety Data Sheets are available at nemco.ca under the Safety Data Sheets. For SDS in French, please contact info@nemco.ca. This material is WHMIS 2015 classified. The SDS contains valuable information critical to the safe handling and proper use of the product. Always take used glycol to an authorized collection point. Avoid discharge into drains, soil, or water. As with any chemical, keep out of reach of children and animals.

# Quality

Nemco works with respected industry suppliers. Nemco Resources Limited manufacturing facility in Winnipeg, Manitoba is proud to be certified to ISO9001. For questions regarding quality, please contact your local sales representative.

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Winnipeg, Manitoba

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