



DATA SHEET

# HEAVY-DUTY NITRITED PG-HTF

## Propylene Glycol-Based Industrial Heat Transfer Fluid and Stationary Engine Coolant Concentrate

Our heavy-duty, nitrated, propylene glycol-based heat transfer fluid (HTF) is designed for use in stationary engine applications.

It contains a full complement of heavy-duty inhibitors, including a minimum of 2400 ppm nitrite (as NO<sub>2</sub>) in concentrate. The formulation is free of silicate and phosphate, which minimizes the problems of hot surface scaling that may occur with other fluids.

### CORROSION, FREEZE AND BURST PROTECTION

HD Nitrated PG-HTF contains an advanced inhibitor system that protects all system metals. These inhibitors, combined with the propylene glycol base, ensure year-round protection against freeze-ups, boil-overs, and engine cooling system corrosion.

This formula also provides outstanding protection from cavitation erosion and corrosion in water pumps and wet sleeve cylinder liners.

### BENEFITS

This fluid is ideal for applications that require a heavy-duty,

silicate-free coolant to:

- Disperse minor oil leakage
- Prevent fouling
- Control hot surface scaling
- Provide peak performance without damage to paint or rubber

### APPLICATIONS

- Oil and gas facilities
- Natural gas processing
- Power generation
- Compressor engines

### INDUSTRY STANDARDS

This heavy-duty HTF meets the following industry specifications:

- ASTM D6210 (Heavy-Duty Diesel Engine Coolant Specification)
- ASTM D4985 (Heavy-Duty Diesel Low Silicate)
- ASTM D3306 (Light-Duty Engine Coolant Specification, Including D1384)

It's recommended for use in these and other engines:

- Cummins CES14603 (as found in service bulletin 3666132-02)

- Cummins 90T8-4
- John Deere H24
- EMD M.I. 1748E
- Caterpillar DEAC
- Waukesha 4-1974D

### RECOMMENDATIONS FOR DILUTION

Water used to dilute the HD Nitrated PG-HTF concentrate can be low-hardness city water or well water, although the use of deionized water is best. We recommend you use water with no more than 350 ppm hardness to dilute concentrate or as make-up water. For optimal performance, water hardness should be below 170 mg/L as CaCO<sub>3</sub>.

Note: Used heat transfer fluids in most states are not considered hazardous unless they contain more than five ppm of lead. We recommend that you never dispose of spent fluid by dumping it into a storm sewer or onto the ground. Instead, contact your local municipality for instructions on where to and how to properly dispose of this fluid and protect our environment.

Physical Properties		
Glycol	Mass %	95.0 Minimum
Corrosion Inhibitors and Water	Mass %	5.0 Maximum
Flash Point	°F	>200°F
Weight per gallon at 60° F - 16° C	lbs.	8.8 Minimum
Silicates	Mass %	Nil

% Antifreeze	Freezing Point		Boiling Point*	
	°F	°C	°F	°C
30%	8	-13	216	102
40%	-8	-22	219	104
50%	-31	-35	222	106
60%	-59	-51	225	107

\*Boiling point shown at atmospheric pressure. Add 40°F for 15 psi radiator cap.

## HD Nitrited PG-HTF Characteristics

Characteristic	Specification	Company Typical	ASTM Method
Chloride (ppm)	25 Maximum	2	D3634
Specific gravity, 60/60°F	1.05-1.06	1.055	D1122
Nitrite (ppm)	2400 Minimum	2700	D5827
Boiling Point, 50% V/V	>212°F/100°C	222°F	D1120
Freezing Point, 50% V/V	<-20°F/-29°C	-31°F	D1177
Ash content, mass %	2.5 Maximum	2.0	D1119
pH, 50% V/V	9.5-10.8	10.3	D1287
Reserve alkalinity*	None specified	10 Minimum	D1121
Water mass %	None specified	3.0 Maximum	D1123
Color		Green	-
Storage stability	None specified	> 1 year	-

\*Reserve alkalinity (RA) is a value agreed between the customer and supplier. The RA listed above is the typical for the additive package being used.

## Additional Water Quality Limits (Maximum)

Chlorides	40 ppm
Sulfate	100 ppm
pH	5.5 to 9.0
Iron	1.0 ppm

