

## Overview

PGS is a heavy-duty, nitrited, propylene glycol-based heat transfer fluid (HTF) specifically designed to be used 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 silicate-free, and phosphate-free which minimizes the problems associated with hot surface scaling that may be experienced with other fluids. PGS provides outstanding protection from cavitation erosion/corrosion in water pumps and wet sleeve cylinder liners, as well as excellent overall corrosion protection

## Product Benefits

PGS contains an advanced inhibitor system that provides a wide range of inhibitors which protect all system metals. These inhibitors combined with the propylene glycol base, give year-round protection against freeze-ups, boil-overs and engine cooling system corrosion. This industrial HTF includes ingredients to disperse minor oil leakage, prevent fouling, control hot surface scaling and it will not damage paint finishes or rubber parts.

## Product Features:

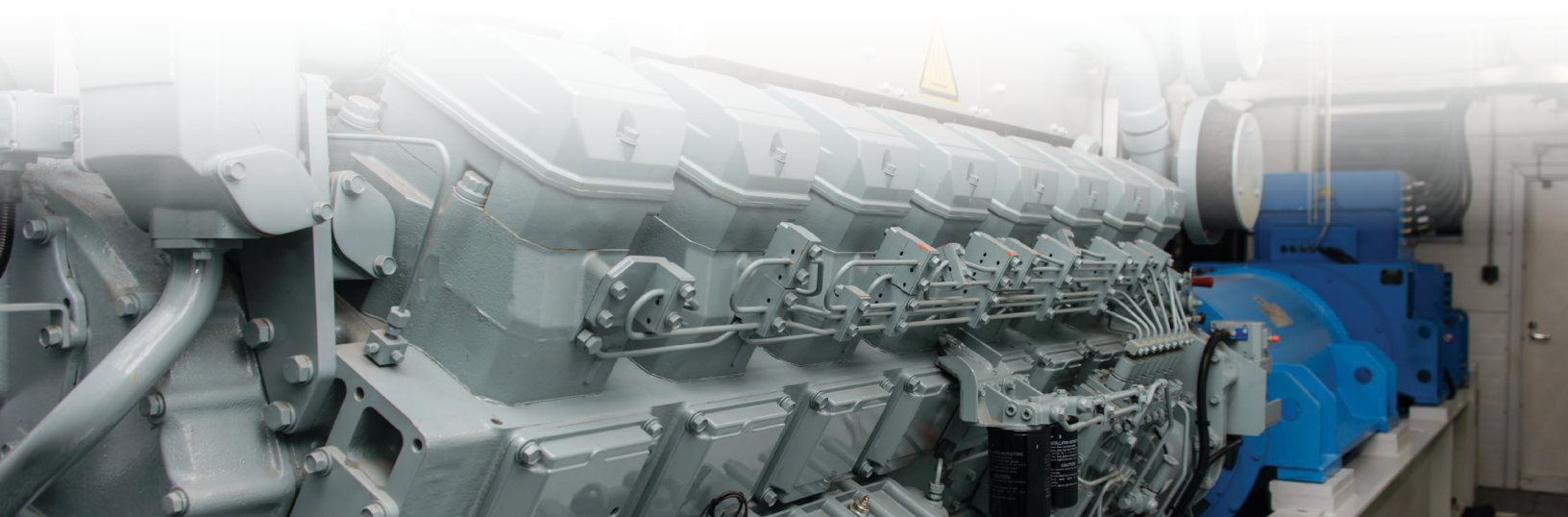
- Advanced inhibitor system.
- Meets the performance requirements of ASTM D6210, ASTM D4985, and ASTM D3306, including D1384.
- Protects all system metals.
- Year-round protection against freeze-ups, boil-overs, and engine cooling system corrosion.
- Helps prevent scaling and fouling of heat transfer surfaces.

## Applications:

- Oil & Gas industry
- Natural gas processing
- Power generation
- Compressor engines
- Heavy duty industry applications

## Recommended for use in the following applications but not limited to these exclusively:

- |                    |                    |
|--------------------|--------------------|
| • Cummins CES14603 | • EMD M.I. 1748E   |
| • Cummins 90T8-4   | • Caterpillar DEAC |
| • John Deere H24   | • Waukesha 4-1974D |





# PGS

PROPYLENE GLYCOL-BASED  
STATIONARY ENGINE HEAT TRANSFER FLUID

| 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                     | Distinctive    | Blue            | --          |
| 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.

| Physical Properties              |        |              |
|----------------------------------|--------|--------------|
| Glycols                          | 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          |

| % PG (Volume) | Freezing Point |     | Boiling Point* |     |
|---------------|----------------|-----|----------------|-----|
|               | °F             | °C  | °F             | °C  |
| 50%           | -31            | -35 | 222            | 106 |
| 60%           | -59            | -51 | 225            | 107 |

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

## Water Quality Requirements

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

This product contains no warranties. Customer is responsible for determining whether product and the information in this document are appropriate for Customer's use. Please visit <https://www.crystal-clean.com/htf-disclaimer> for full details.

## Additional Water Quality Limits (Maximum)

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

NOTE: Used Heat Transfer Fluids in most states are not hazardous unless it contains more than 5 ppm of lead. We recommend that spent fluid **never** be disposed of by dumping 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.