

Features

- Inhibitor system is phosphate-based.
- Functional equivalent to DOWFROST® and JEFFCOOL® P150 and can be mixed with these products with no adverse effects.
- Unique additive package:
 - Meets or exceeds both ASTM D1384 & ASTM D8039.
 - Controls corrosion of metals.
 - Helps prevent scaling & fouling of heat transfer surfaces.
 - Buffers pH to maintain it's optimal operating range.

Applications

Applications include (but are not limited to):

- HVAC system freeze/burst/corrosion protection
- Process cooling/heating
- Solar heating
- Refrigeration warehouse floor heating
- Thermal energy storage
- Ice skating rinks
- Sidewalk snow melting systems
- Cold room dehumidifier

Operating Temperatures & Freeze/Burst Protection

H50PG-HTF Concentrate can be used to provide both freeze and burst protection for systems which may be exposed to very low temperatures. To obtain adequate freeze protection, select a glycol concentration with a freeze point at least 5°F below the lowest anticipated ambient temperature.

Water used to dilute H50PG-HTF Concentrate can be low-hardness, city water or well water, although the use of deionized water or distilled water is best. It is recommended that water with no more than 170 ppm hardness be used to dilute concentrate or be used as make-up water.

%Vol H50PG-HTF Concentrate	Freezing Point (°F, 760 mm Hg)	Boiling Point (°F, 760 mm Hg)
15**	22.7	213
30	8.4	216
40	-6.7	218
50	-28.6	222
60	-59.9	226

**The concentration should be at least 30% glycol to maintain adequate corrosion inhibitors. If the concentration is below 30%, inhibitor package must be added to equal the amount found at a 30% concentration.

Overview

H50PG-HTF Concentrate is a fully-formulated heat transfer fluid containing an inhibitor and additive package that controls corrosion of metals, helps prevent scaling and fouling of heat transfer surfaces and buffers the pH to maintain it in the optimum operating range.

H50PG-HTF Concentrate meets or exceeds ASTM D1384, which is the industry-accepted multi-metal corrosion test, as well as **ASTM D8039** Standard Specification for Heat Transfer Fluids (HTF) for Heating and Air Conditioning (HVAC) Systems. The inhibitor system is based on a high-phosphate, multi-component formulation which makes H50PG-HTF Concentrate equivalent in terms of functionality and performance to the very best national brands on the market.

H50PG-HTF Concentrate contains 96.0% propylene glycol and 4.0% inhibitors, other performance-enhancing additives and deionized water.

Product Specifications

PROPERTY	VALUE
Propylene glycol (WT%)	95 min
Corrosion inhibitors (WT%)	5 max
Flash point (°F)	220 min
Chloride (ppm)	25 max
Reserve alkalinity (ml)	10 min
pH (50% v/v)	9.8 – 10.8
Specific gravity (60/60°F)	1.04 – 1.06
Color	yellow*
Foam	150 ml max; 5 s break max

*Standard color. Custom color available upon request

Corrosion Protection

H50PG-HTF Concentrate provides outstanding corrosion protection for copper, brass, solder, steel, and cast iron and aluminum. It is also completely compatible with most plastics, elastomers and types of rubber. Its corrosion protection system protects iron, steel and aluminum metal surfaces to protect them from acidic attack and rust formation.

H50PG-HTF Concentrate also contains tolytriazole to protect copper, brass and solder used in multi-metal systems. In addition, a very effective buffering system neutralizes acids formed by the normal thermal and oxidative degradation of glycols, thus maintaining the pH in its optimum range.

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Berryman Chemical Inc. does not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.