EQUITHERM HP®

HVAC HEAT TRANSFER FLUID

EQUITHERM® Manufactured by:
Solvents & Petroleum Service, Inc.
1405 Brewerton Road | Syracuse, NY 13208

Ethylene Glycol

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HVAC Heat Transfer Fluid | Ethylene Glycol

EQUITHERM® HP is a virgin grade ethylene glycol-based heat transfer fluid that utilizes high performance industrial inhibitor chemistry to guarantee maximum heat transfer efficiency and economy in closed-loop multi-metal systems. EQUITHERM® HP can increase your systems performance and longevity while decreasing long-term maintenance costs.

FEATURES

- Virgin Grade Glycol-Based
- For Use with Water-based or Glycol-based HTFs
- Safe for All Common Non-Metallic Components
- Free from Nitrites, Amines, and Silicates
- Scale Inhibitors/Dispersants Prevent Harmful Deposits
- Foam Control
- Formulated with Phosphates

Available in Bulk, Mini-Bulk, Drums and Totes

APPLICATIONS

HVAC Systems
Freeze, Burst, Corrosion Protection

Thermal Energy Storage

Process Cooling & Heating

Refrigeration Warehouse Floor Heating

Ice Rinks

Computer Cooling Systems

Sidewalk & Playing Field Subsurface Heating

**If your application is not listed, contact SPS to find out how we can service your needs.*

SPECIFICATIONS

Passes ASTM D1384
Corrosion Test for Engine Coolants in Glassware

Passes ASTM D1881
Foaming Tendency Test

Operating Temperature of -50°F to 325 °F

Hard Water Stability

Typical Properties	Concentrate	60/40	50/50	40/60	30/70
Ethylene Glycol, % wt	94.0	59.0	49.7	40.2	30.5
Inhibitors + Water, % wt	6.0	41.0	50.3	59.8	69.5
Density g/mL 68°F	1.122 (1.107-1.137)	1.086 (1.071-1.101)	1.072 (1.057-1.087)	1.057 (1.042-1.072)	1.044 (1.029-1.059)
pH, range (10.0-11.0)	10.9	10.8	10.6	10.5	10.3
Reserve Alkalinity, mL (min)	6.45 (>5.0)	3.85 (>3.0)	3.25 (>2.5)	2.3 (>1.5)	2.05 (>1.3)

The following metal test specimens were used:

1. ***Steel***, UNS G10200 (SAE 1020), Chemical composition of the carbon steel is as follows: carbon, 0.17 to 0.23%; manganese, 0.30 to 0.60%; phosphorous, 0.040% maximum; sulfur, 0.050% maximum.

2. ***Copper***, conforming to UNS C11000 (SAE CA110) of UNS C11300 (SAE CA113). Cold-rolled.

3. ***Brass,*** conforming to Alloy UNS C26000 (SAE CA 260).

4. ***Solder,*** A brass specimen coated with solder conforming to Alloy Grade 30A (SAE 3A).

5. ***Cast Aluminum***, conforming to Alloy UNS A23190 (SAE 329).

6. ***Cast Iron,*** conforming to Alloy UNS F10007 (SAE G3500).

Metal	Beaker 1 (mg)	Beaker 2 (mg)	Average Weight Loss(mg)	ASTM Limit* (mg)
Copper	-0.83	-0.03	-0.43	10
Solder	6.00	12.90	9.45	30
Brass	1.67	1.87	1.77	10
Steel	0.23	-1.97	-0.87	10
Cast Iron	4.07	-1.13	1.47	10
Cast Aluminium	8.13	7.83	7.98	30
pH Before	10.17	10.17		
pH After	9.56	9.72		
Appearance Before	Clear; Colorless	Clear; Colorless		
Appearance After	Clear; Amber	Clear; Dark Amber		

Notes:

*Limits published in ASTM D3306 Standard Specification for Glycol Base Engine Coolant for Automobile and Light-Duty Service. These performance limits are also required for heavy duty coolants and recycled coolants (ASTM D6471 or D6472). ASTM D1384 is only a test method.

A negative number indicates a net weight gain after correcting for the cleaning bank. Refer to the published method for information on the calculation.

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TECHNICAL SERVICE GUIDE

Follow this technical service guide to help catch issues before they cause problems, to extend fluid and equipment performance life and to avoid unplanned downtime. By monitoring and testing heat transfer fluids, thermal and oxidative stresses can be identified and corrected before it's too late.

i MITIGATE Risk of...

- Corrosion, Cavitation and Fouling
- Freezing
- Decreased Performance
- Start-up Problems
- Blockages
- Pump Gasket Failures
- Increased Viscosity and Vapor Pressure
- Fire Risks

*REPLACE Fluids if...

pH..... <7.5

Chloride..... >200 ppm

Water..... >75

*ADD Fluids if...

Phosphate (PO_4)..... <1000 ppm

Tolyltriazol (TT).....<100 ppm

Thresholds provided are meant only as guidelines to indicate fluid break-down and stresses. If thresholds are exceeded, please contact us immediately in order to have a full test analysis conducted and proper actions established.

✓ MONITOR Levels of...

Major Component	Formula
Disodium phosphate	Na_2HPO_4
Sodium nitrate	$NaNO_3$
Sodium tolyltriazol	NaTT
Sodium molybdate	Na_2MoO_4
Scale Inhibitor	Proprietary
Defoamer	Proprietary

NEED A SAMPLE TESTED?
Call 1-800-315-4467

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