

## © EQUITHERM HP



## HVAC Heat Transfer Fluid | Propylene Glycol

EQUITHERM ${ }^{\circledR}$ HP s a virgin grade propylene 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 ${ }^{\oplus}$ 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
*Ifyour 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 $-50^{\circ} \mathrm{F}$ to $325{ }^{\circ} \mathrm{F}$

Hard Water Stability

| Typical Properties | Concentrate | $\mathbf{6 0 / 4 0}$ | $\mathbf{5 0 / 5 0}$ | $\mathbf{4 0 / 6 0}$ | $\mathbf{3 0 / 7 0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Propylene Glycol, \% wt | 93.6 | 57.3 | 48.0 | 38.6 | 29.0 |
| Inhibitors + Water, \% wt | 6.4 | 42.7 | 52.0 | 61.4 | 71.0 |
| Density $\mathrm{g} / \mathrm{mL} 68^{\circ} \mathrm{F}$ | $1.050(1.035-1.065)$ | $1.046(1.031-1.061)$ | $1.043(1.028-1.058)$ | $1.034(1.019-1.049)$ | $1.022(1.007-1.037)$ |
| pH, range $(10.0-11.0)$ | 10.9 | 10.8 | 10.6 | 10.5 | 10.3 |
| Reserve Alkalinity, $\mathrm{mL}(\mathrm{min})$ | $5.95(>5.0)$ | $3.7(>3.0)$ | $3.3(>2.5)$ | $2.5(>1.5)$ | $1.7(>1.3)$ |

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 <br> Weight <br> Loss(mg) | ASTM Limit* <br> $(\mathbf{m g})$ |
| :--- | :---: | :---: | :---: | :---: |
| 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 |  |  |

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HVAC Heat Transfer Fluid | Propylene Glycol 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


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.

| $\checkmark$ MON/IORLevels of... |  |
| :---: | :---: |
| Major Component | Formula |
| Disodium phosphat Sodium nitrate. $\qquad$ Sodium tolyltriazol. Sodium molybdate.. Scale Inhibitor $\qquad$ Defoamer. $\qquad$ | $\begin{aligned} & \mathrm{Na}_{2} \mathrm{HPO}_{4} \\ & \mathrm{NaNO}_{3} \\ & \mathrm{NaTT}^{2} \\ & \mathrm{Na}_{2} \mathrm{MoO}_{4} \\ & \text { Proprietary } \\ & \text { Proprietary } \end{aligned}$ |



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


