



PROTOCOL[®] LT-100

HVAC HEAT TRANSFER FLUID

Product Description

PROTOCOL LT is an ethylene glycol based heat transfer fluid. The LT blends are designed to provide excellent freeze point depression, burst protection, and corrosion protection in water-based, closed circuit heating and air conditioning systems.

PROTOCOL LT fluids have an operating range from -60°F to 250°F. The fluid contains a blend of organic and inorganic inhibitors specifically formulated to keep mixed metal systems free of corrosion and without fouling critical heat exchange surfaces.

PROTOCOL LT fluid is available as concentrate or premixed with deionized water to meet your exact specification for freeze, burst, and boil protection. It is recommended that PROTOCOL LT heat transfer fluids be purchased premixed with deionized water to ensure optimal corrosion protection and heat transfer efficiency.

PROTOCOL LT has little or no negative effect on seals, elastomers, or other construction materials commonly found in HVAC systems. However, we do not recommend its use in systems containing CPVC (chlorinated polyvinyl chloride). Test Data by manufacturers has shown that glycols weaken this material and warn that the use of ethylene or propylene glycol with CPVC could lead to stress cracks and premature failure.

"Performance products of unparalleled quality and value" sm

Technical Data

Typical composition: LT-100, v %

Ethylene Glycol	95.6
Inhibitors	4.4
Color (typical)	Bright Pink
Specific Gravity	1.12 – 1.13
pH	8.5 – 10.0
Reserve Alkalinity, 100%	11.0 min.
Evaporation rate:	< 1

Typical Properties of LT-35 v% solutions.

BP @ 760 mm Hg	~ 219°F
Flash Point	None
VP mm Hg (100°F)	41 – 42
Thermal Conductivity (100°F)	0.26 – 0.27
Specific Heat (100°F)	0.89 – 0.90
Viscosity, cP (100°F)	1.33 – 1.35

Typical properties for aqueous solutions.

Freeze Point (°F)	Volume %	Boiling Point (°F)
24	10	213
15	20	215
9	25	217
3	30	218
- 4	35	220
- 13	40	222
- 34	50	225