



# PROTOCOL<sup>®</sup> 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, depending on the concentration. LT coolants contain 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 is available as concentrate or premixed with deionized water to meet your exact specification for freeze, burst, and boil protection. To ensure optimal corrosion protection and heat transfer efficiency, we recommend purchasing this product in a premixed version.

PROTOCOL HT fluid has little to no negative effect on seals, elastomers, or other materials commonly found in most industrial systems. However, this product should not be used in systems containing galvanized steel unless etching of the zinc, or magnesium-based coating, is acceptable.

PROTOCOL HT is compatible with all nationally recognized industrially inhibited coolants containing ethylene glycol and can be safely commingled without compromising the integrity of either fluid. If desired, HT blends can be color coordinated, at no additional charge.

*"Performance products of unparalleled quality and value" <sup>sm</sup>*

### Technical Data

#### Typical composition: LT-100v %

Ethylene Glycol	≥93
Inhibitors	≥6
Color (typical)	Bright Pink
Specific Gravity	~1.10 – 1.20
pH, 50% solution	~8.5 – 11.5
Reserve Alkalinity, 100%	~11.0 min.

#### Typical Properties of LT-35v% solutions.

BP @ 760 mm Hg	~ 220°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 of 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