



# PROTOCOL<sup>®</sup> NT

## INDUSTRIAL GRADE COOLANT

### Product Description

PROTOCOL NT is a propylene glycol based heat transfer fluid. The NT blends will provide excellent freeze point depression, burst protection, and corrosion protection in water-based, closed circuit heating and air conditioning systems when a non-toxic coolant is preferred or mandated by law.

PROTOCOL NT fluids have an operating range from -50°F to 325°F, depending on the concentration. NT 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 NT coolants are available as concentrate or premixed with deionized water to meet your 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 NT has little to 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 galvanized steel unless etching of the zinc, or magnesium-based coating, is acceptable.

PROTOCOL NT blends are compatible with most nationally recognized industrially inhibited propylene glycol based coolants, and can be safely commingled without compromising the integrity of either coolant.

### Technical Data

#### Typical composition: NT-100, v%

Propylene Glycol	≥93
Inhibitors	≥6
Color (typical)	Bright Pink
Specific Gravity	~1.040 -1.059
pH, 50% solution	~8.5 – 11.0
Reserve Alkalinity, 100%	~11.0 min.

#### Typical properties of a 40-V% solution.

BP @ 760 mm Hg (40%)	~220 °F
Flash Point (40%)	None
VP mm Hg (40% @ 100°F)	~44
Thermal Conductivity (40% @ 100°F)	~0.24
Specific Heat (40% @ 100°F)	~0.91
Viscosity, cP (40% @ 100°F)	~2.30

#### Typical properties of aqueous solutions.

Freeze Point (°F)	Volume %	Boiling Point (°F)
26	10	212
19	20	213
15	25	214
9	30	216
2	35	217
-6	40	220
-28	50	223

*"Performance products of unparalleled quality and value" sm*