

HOUGHTON CHEMICAL CORPORATION

52 Cambridge Street • Allston (Boston) • MA 02134

Phone: (800) 777-2466 • Fax: (617) 254-2713

www.houghton.com



SAFE-T-THERM® AL Product Data Sheet

Inhibited Propylene Glycol-based Heat Transfer Fluid

SAFE-T-THERM® AL heat transfer fluid is an inhibited propylene glycol solution designed for use in aluminum hydronic systems for freeze and corrosion protection.

SAFE-T-THERM® AL is designed to protect components in aluminum systems. SAFE-T-THERM® AL also includes a fluorescent yellow dye for leak detection. SAFE-T-THERM® AL should not be used with galvanized steel, Polyvinyl chloride (PVC), Chlorinated polyvinyl chloride (CPVC) or Neoprene tubing, piping, or other plumbing fixtures and fittings.

For adequate corrosion protection, do not dilute SAFE-T-THERM® AL Concentrate below 30% SAFE-T-THERM® AL / 70% water concentration.

Recommended use temperature range: -50°F to 225°F (-45°C to 107°C).

For health and safety information for this product, contact Houghton for a Safety Data Sheet (SDS).

SAFE-T-THERM® AL						
Typical Properties by Concentration						
Properties ¹	Conc.	60%	50%	40%	35%	30%
Propylene Glycol	93%	60%	50%	40%	35%	30%
Performance Additives and Water	7%	40%	50%	60%	65%	70%
Appearance	Liquid, Clear, Fluorescent Yellow	Liquid, Clear, Fluorescent Yellow	Liquid, Clear, Fluorescent Yellow	Liquid, Clear, Fluorescent Yellow	Liquid, Clear, Fluorescent Yellow	Liquid, Clear, Fluorescent Yellow
Specific Gravity (15/15°C 60/60°F)	1.053 - 1.060	1.048 - 1.053	1.043 - 1.049	1.037 - 1.043	1.033 - 1.038	1.029 - 1.034
pH 50% glycol	8.0 - 9.5	8.0 - 9.5	8.0 - 9.5	8.0 - 9.5	8.0 - 9.5	8.0 - 9.5
Reserve Alkalinity (min)	3	1	1	1	1	1
Freeze Point Max	-22°F / -31°C (as 50%)	-49°F / -45°C	-22°F / -31°C	-4°F / -20°C	4°F / -16°C	10°F / -12°C

¹Concentrate based on volume of Propylene Glycol, mixtures based on volume of SAFE-T-THERM® AL

Typical properties, not to be construed as specifications. As use conditions are not within its control, Houghton Chemical Corporation does not guarantee results from use of the information or products herein; and gives no warranty, express or implied.

NOTE: These figures are examples only and may not be appropriate to your situation. Generally, for an extended margin of protection, you should select a temperature in this table that is at least 3°C (5°F) lower than the expected lowest ambient temperature. Houghton Chemical Corporation recommends a minimum glycol concentration of 25%. At lesser concentrations, the likelihood of bacteria growth increases. Also, at less than 25% concentrations there may not be enough inhibitor present to prevent corrosion of the system metals. Additional inhibitors can be purchased from Houghton Chemical Corporation.

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Date Revised: 07/03/2019

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