

September 2011

**Product**

PG-Pure

**Catalog Number**

PGI-55

**Purpose**

PROTEK-PURE is a concentrated industrial propylene glycol. When mixed with the proper amount of water it is designed to provide freeze and burst protection, excellent thermal conductance, protection against system corrosion and fouling, and long-term system stability in closed recirculating water loops.

PROTEK-PURE is GRAS (Generally Recognized As Safe) contains no corrosion inhibitors, and may be used systems where incidental contact with potable water might occur.

PROTEK-PURE is compatible with corrosion and scale inhibitors used in closed loops, cooling towers and boilers.

**Advantages**

PROTEK-PURE has an operating range of -70°F to 250°F, with burst protection to minus 100°F. The freeze point and burst point is controlled by the PROTEK-PURE/water ratio.

**Properties**

Property

Propylene Glycol % mass (m/m) .....	99.5 .....	ASTM 7515, D5164
Apparent specific gravity		
20/20°C.....	1.0375 to 1.0390 .....	ASTM, D5164 or
25/25°C.....	1.0351 to 1.0366	
Color, Pt-Co units, max: .....	15 .....	ASTM D5164
Distillation range, 760 mmHg		
Initial Boiling Point, °C min .....	185 .....	ASTM D0202
Dry point, °C, max.....	190	
Acidity, as acetic acid, wt %, max...0.002 .....		ASTM 0202
Arsenic, As, , ppm, max.....	1 .....	ASTM D5164
Chloride as Cl ppm, max. ....	0.5 .....	Internal Turbidimetric Chloride Method
Heavy metals as Pb, ppm, max. ....	5	
Iron, ppm, max .....	0.5 .....	ASTM E2020
Sulfate, ppm, max.....	60 .....	USP
Water, wt %, max.....	0.2 .....	Internal Karl Fischer Method

**Properties**

Mixing Rates

PROTEK-PURE CONCENTRATION	PROTEK-PURE/ WATER MIX RATIO	FREEZE POINT/ BURST POINT	MINIMUM FLOW POINT
70%	7:3	-100°F	-70°F
50%	1:1	-80°F	-47°F
40%	2:3	-60°F	-30°F
30%	3:7	-20°F	-15°F

PROTEK-PURE is a concentrate. It must be mixed with water to provide freeze and burst protection.

PROTEK-PURE solutions remain pumpable down to the minimum flow points listed.

**Directions**

For new or fouled systems, use a cleaner designed to clean and passivate the system such as Triple Treat (SCM-120), or follow the equipment manufacturer’s recommendations.

After the system is clean and passivated, add PROTEK-PURE at a rate that will give the desired freeze protection and circulate the solution through the system to ensure thorough mixing.

For inhibiting product breakdown and corrosion, add SCM-117, ProTek Inhibitor. The heat transfer fluid should be tested to ensure the concentration of corrosion inhibitor is adequate.

**Safety Data**

Consult the Material Safety Data Sheet before using this product. Use only according to label directions. Eye protection is recommended when using this or any industrial chemical product. Wash hands after using this product.

Caution: May cause temporary eye irritation. Avoid breathing spray mists. Do not take internally. Keep out of reach of children.

First Aid: In case of skin or eye contact, flush the affected area with water immediately for 15minutes. If eye irritation persists, get medical attention. For ingestion, immediately drink 3-4 glasses of milk or water and call the nearest poison control center. For inhalation, remove the individual to fresh air. If respiratory distress persists, get medical attention.