

PRODUCT DESCRIPTION

Permafrost E is an ethylene glycol based heat transfer fluid for use in higher temperature, heavy duty applications. This material contains a fully formulated blend of corrosion inhibitors to provide exceptional freeze point and burst protection while maintaining the integrity of your system and equipment.

Our unique blend of corrosion inhibitors is engineered to protect mixed metal systems from corrosion, provide exceptional freeze point depression, and maintain heat exchange surfaces. Permafrost heat transfer fluids are manufactured using only virgin glycol to ensure premium performance and reliability.

APPLICATIONS

Permafrost E delivers superior protection in conditions from -51.1°C to 176.68 °C in the following applications:

Natural Gas Compressor Engines
High/Low Speed Stationary Engines
Heat Tracing

Direct or Indirect Fired Line Heaters
Standby Generators
Air Compressor Engines

Permafrost E can be used safely in a wide array of applications and will not mar elastomers, seals, or other construction materials, but is not recommended for galvanized steel systems unless etching of zinc and magnesium based coatings is deemed acceptable.

PACKAGING

205L Drum, 1,000 L Tote/IBC (Intermediate Bulk Container), Truck.

TECHNICAL DATA

Ethylene Glycol, V%	~ 93
Inhibitors	~ 7
Colour	Bright yellow or tailored
Specific Gravity	1.125 – 1.130
pH	8.5 – 10.5
Reserve Alkalinity, 100%	+20.0

Typical Physical Properties:

BP @ 760 mm Hg (50%)	107.22 °C
Flash point	None
VP mm Hg (50% @ 20°C)	13.31
Thermal Conductivity (50% @ 20°C)	0.225
Specific Heat (50% @ 20°C)	0.81
Viscosity, cP (50% @ 20°C)	3.37

Typical physical properties of aqueous solutions:

FP °C	V%	BP °C
-4.4	10	100.56
-9.4	20	101.67
-12.8	25	102.78
-16.1	30	103.33
-20.0	35	104.44
-25.0	40	105.56
-36.7	50	107.22

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PRODUCT DESCRIPTION

Permafrost P is a non-toxic propylene glycol based heat transfer fluid for use in a wide array of industrial applications. This material contains a fully formulated blend of corrosion inhibitors to provide exceptional freeze point and burst protection while maintaining the integrity of your system and equipment.

Our unique blend of corrosion inhibitors is engineered to protect single and mixed metal systems from corrosion, provide exceptional freeze point depression, and maintain heat exchange surfaces. Permafrost heat transfer fluids are manufactured using only virgin glycol to ensure premium performance and reliability.

APPLICATIONS

Permafrost P delivers superior protection in conditions from -45.6°C to 162.78°C in the following applications:

HVAC (Heating, Venting, Air Conditioning)
 Natural Gas Compression Engines
 Ice Melt Systems
 LNG Vaporizers

Natural Gas Heaters
 Waste Heat Recovery
 Solar and GSHP Systems
 Arenas

Permafrost P can be used safely in a wide array of applications and will not mar elastomers, seals, or other construction materials, but is not recommended for CPVC (chlorinated polyvinyl chloride). Test data indicates that glycols can weaken this material and that ethylene or propylene glycol use can marginalize the integrity of CPVC.

PACKAGING

20 L Pail, 205L Drum, 1,000 L Tote/IBC (Intermediate Bulk Container), Truck.

TECHNICAL DATA

Propylene Glycol, V%	>93
Inhibitors	>6
Colour	Bright yellow or tailored
Specific Gravity	1.049 – 1.059
pH	8.5 – 11.5
Reserve Alkalinity, 100%	11.0 Min.
Evaporation Rate	<1

Typical Properties of 40% by volume solution:

BP @ 760 mm Hg	103.89 °C
Flash point (40%)	None
VP mm Hg (40% @ 37.78° C)	44.3
Thermal Conductivity (40% @ 37.78° C)	0.24
Specific Heat (40% @ 37.78)	0.91
Viscosity, cP (40% @ 37.78)	2.3

Typical physical properties of aqueous solutions:

FP °C	V%	BP °C
-3.3	10	100.00
-7.2	20	100.56
-9.4	25	101.11
-12.8	30	102.22
-16.7	35	102.78
-21.1	40	104.44
-33.3	50	106.11

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PRODUCT DESCRIPTION

Permafrost T is a fully formulated desiccant for natural gas comprised of triethylene glycol blended with superior corrosion inhibitors for use in dehydration systems. Permafrost T delivers exceptional dew point depression combined with superior hydrocarbon separation while protecting your system from organic acids created in the regen phase of dehydration systems.

Our unique blend of corrosion inhibitors were specifically engineered to provide greater stability and prolonged service life. Our superior corrosion inhibitors deliver greater reserve alkalinity marginalizing the effects of organic acids caused by oxidation.

FLEXIBILITY

Permafrost T can be added to existing analogues of inhibited triethylene glycol without effecting either fluid. In fact, addition of Permafrost T can actually improve the performance of your existing fluid. Please note, we highly recommend having your fluid analyzed prior to commingling any material to ensure that your existing system is suitable for continued use.

Permafrost T can also be utilized in air dehydration systems where humidity control is desired for protection against extreme rusting.

PACKAGING

205L Drum, 1,000 L Tote/IBC (Intermediate Bulk Container), Truck.

TECHNICAL DATA

Composition V%		Typical Physical Properties:	
Triethylene Glycol	>95	BP @ 760 mm Hg	~ 210 °C
Inhibitors	>4	Flash Point	>148.89 °C
Colour	Water-white	VP (mm Hg @ 204.4 °C)	70 – 75
Specific Gravity	1.12 – 1.13	Thermal Conductivity @ 204.4 °C	0.1 – 0.15
pH, 50% solution	8.0 – 10.0	Specific Heat @ 204.4 °C	0.7 – 0.75
Reserve Alkalinity, new	>5.0	Viscosity, cP @ 20 °C	49.0
		Ht of Vaporization (btu/lb@1atm)	166

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PRODUCT DESCRIPTION

Permafrost Cav Pro (cavitation protection) is an ethylene glycol based heat transfer fluid for use in higher temperature, heavy duty applications. This material contains a fully formulated blend of corrosion inhibitors to provide an exceptional coolant while protecting wet-sleeve liners in natural gas fired equipment.

Our unique blend of corrosion inhibitors is engineered to protect mixed metal systems from corrosion, provide exceptional freeze point depression, and maintain heat exchange surfaces. Permafrost heat transfer fluids are manufactured using only virgin glycol to ensure premium performance and reliability.

APPLICATIONS

Permafrost Cav Pro delivers superior protection in conditions from -51.1°C to 176.68 °C in the following applications:

Natural Gas Compressor Engines
High/Low Speed Stationary Engines
Heat Tracing

Direct or Indirect Fired Line Heaters
Standby Generators
Air Compressor Engines

Permafrost Cav Pro can be used safely in a wide array of applications and will not mar elastomers, seals, or other construction materials, but is not recommended for galvanized steel systems unless etching of zinc and magnesium based coatings is deemed acceptable.

PACKAGING

205L Drum, 1,000 L Tote/IBC (Intermediate Bulk Container), Truck.

TECHNICAL DATA – Permafrost Cav Pro 100, v%

Ethylene Glycol, V%	≥ 92
Inhibitors	≥ 8
Colour	Bright blue or customized
Specific Gravity	~ 1.125 – 1.130
pH	~ 8.5 – 10.5
Reserve Alkalinity, 100%	~ 15.0 min

Typical Physical Properties Permafrost Cav Pro 50:

BP @ 760 mm Hg (50%)	~ 107.22 °C
Flash Point	None
VP mm Hg (50% @ 20°C)	~ 13.31
Thermal Conductivity (50% @ 20°C)	~ 0.225
Specific Heat (50% @ 20°C)	~ 0.81
Viscosity, cP (50% @ 20°C)	~ 3.37

Typical physical properties of aqueous solutions:

FP °C	V%	BP °C
-4.4	10	100.56
-9.4	20	101.67
-12.8	25	102.78
-16.1	30	103.33
-20.0	35	104.44
-25.0	40	105.56
-36.7	50	107.22

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