

Technical Bulletin

JEFFCOOL® HD INDUSTRIAL COOLANT AND HEAT TRANSFER FLUID

GENERIC NAME	Inhibited propylene glycol
DESCRIPTION	JEFFCOOL® HD coolant is a propylene glycol-based, high temperature industrial coolant and heat transfer fluid containing corrosion inhibitors, antifoam, and dye. JEFFCOOL® HD coolant should be diluted with water to between 30% and 60% by volume depending on the desired freeze point.
APPLICATIONS	JEFFCOOL® HD coolant can be used in heat transfer applications including line heaters, snow melting systems and runways; as a coolant for ice rinks and air conditioning systems (HVAC); and as a heat transfer agent for solar energy collection systems. Propylene glycol is generally suitable for applications in which toxicological considerations are critical. The inhibitor package in JEFFCOOL® HD coolant is designed to protect all common metals used in industrial equipment including cast iron, steel, copper and brass up to 325°F and aluminum up to 190°F. JEFFCOOL® HD coolant passes the ASTM D1384 corrosion test per the limits set in ASTM D3306. For applications where incidental contact with food can occur, such as in food processing equipment, select the corresponding JEFFCOOL® P200 series propylene glycol-based fluid.

SALES SPECIFICATIONS

<u>Property</u>	<u>Specifications</u>	<u>Test Method*</u>
Appearance	Slightly hazy and free of suspended solids	ST-30.1
Freeze point,		ASTM D3321
50 vol % solution, °C	-32 max.	
50 vol % solution, °F	-25 max.	
pH, 33 vol% solution	9.5 – 10.5	ASTM D1287
Reserve Alkalinity, 10 mL sample, mL 0.1 N HCl	10.5 – 14.5	ASTM D1121
Specific Gravity, 60/60°F	1.05 – 1.06	ASTM D1122
Water, wt%	4.0 max.	ASTM D1123

*Methods of Test are available from Huntsman Corporation upon request.

ADDITIONAL INFORMATION

Regulatory Information

See SDS for all regulatory information.

Typical Properties

Color	Yellow
Flash point, COC, °C (°F)	100 (212)
Boiling point, °C (°F)	187 (368)
Melting/Freezing point, °C (°F)	< 0 (< -32)
Density, lb/gal, 15.6°C (60°F)	8.8
Viscosity, cSt, 20°C (68°F)	< 70
Water solubility, wt%	> 10

TOXICITY AND SAFETY

For additional information on the toxicity and safe handling of this product, consult the Safety Data Sheet prior to use of this product.

HANDLING AND STORAGE

JEFFCOOL[®] HD coolant may be stored in unlined carbon steel tanks and drums. If storage of concentrated JEFFCOOL[®] HD coolant for periods over 12 months is desired, it is recommended that the storage vessels be constructed from aluminum, stainless steel, or lined carbon steel. Vinyl, epoxy, and phenolic linings are suitable.

The normal precautions associated with any chemical should be observed in handling JEFFCOOL[®] HD coolant. This product is neither explosive nor flammable under normal storage conditions. The propylene glycol in this product is considered practically nontoxic. Splashes onto eyes or skin, however, must be washed away quickly and medical treatment is advised for eye exposure. Breathing of the vapors or mists should be avoided.

AVAILABILITY

JEFFCOOL[®] HD coolant is available in tank wagons and 55-gallon, non-returnable steel drums. Bulk and drum inventory is available at select locations throughout the United States.

5301-0515

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