

Technical Bulletin

JEFFCOOL[®] E103 INDUSTRIAL COOLANT AND HEAT TRANSFER FLUID

GENERIC NAME	Inhibited ethylene glycol
DESCRIPTION	JEFFCOOL [®] E103 is a pre-diluted ethylene glycol-based industrial coolant and heat transfer fluid containing corrosion inhibitors, antifoam and dye. JEFFCOOL [®] E103 is a 30% by volume mixture of JEFFCOOL [®] E100 and deionized water.
APPLICATIONS	JEFFCOOL [®] E103 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. The inhibitor package in JEFFCOOL [®] E103 is designed to protect all common metals used in industrial equipment including cast iron, steel, copper and brass up to 300°F and aluminum up to 190°F. JEFFCOOL [®] E103 coolant passes the ASTM D1384 corrosion test per the limits set in ASTM D3306.

For applications where ingestion of the fluid by mammals is a possibility, select the corresponding JEFFCOOL[®] P150 series propylene glycol-based fluid or, for 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, as is		ASTM D3321
°C	-14 max.	
°F	+6 max.	
pH, as is	9.5 – 10.5	ASTM D1287
Reserve Alkalinity, mL 0.1 N HCl using a 30 mL sample	10.0 – 14.0	ASTM D1121
Specific gravity, 60/60°F	1.03 – 1.06	ASTM D1122
Water, wt%	72 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

Flash point, COC, °C (°F)	>93 (>200)
Boiling point, °C (°F)	104 (219)
Color	Red
Density, lb/US gal, 60°F	8.7
Viscosity, cSt, 20°C (68°F)	3
Water solubility, %	>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[®] E103 coolant may be stored in unlined carbon steel tanks and drums. If storage of concentrated JEFFCOOL[®] E103 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.

For detailed information on the storage and handling of JEFFCOOL[®] E103 coolant, see our bulletin on "Storage and Handling of JEFFCOOL[®] Coolants."

AVAILABILITY

JEFFCOOL[®] E103 coolant is available in tank wagons and 55-gallon, non-returnable steel drums. Bulk and drum inventory of JEFFCOOL[®] E103 is available at select locations throughout the United States.

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