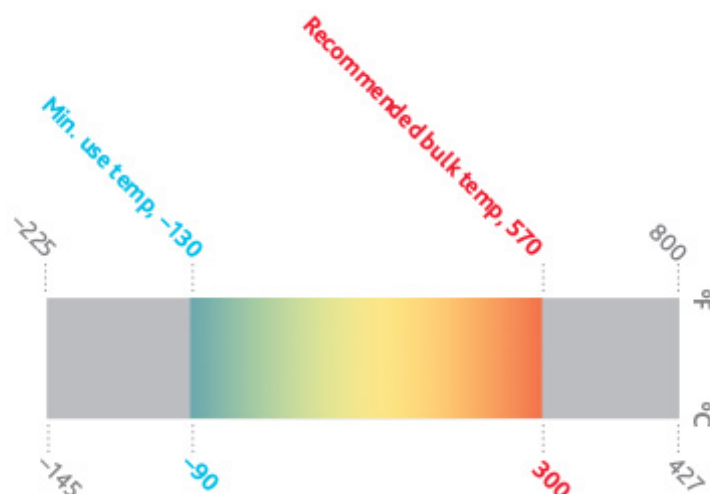


Technical Data Sheet

MARLOTHERM® XC Heat Transfer Fluid

Product Description

Marlotherm XC is a high performance, synthetic organic heat transfer fluid designed especially for use in the liquid phase in closed heat transfer systems with forced circulation. Considering its superior physical and thermal properties, Marlotherm XC is very well suited for heat transfer processes that require excellent heating and/or cooling performance throughout its recommended temperature range.



Typical Properties

Property	Test Method	Typical Value, Units
Dielectric Constant @ 20°C (68°F)		2.38
Moisture Content, maximum	ASTM E-203	<300 ppm
Copper Corrosion	ASTM D 130	1 A
Liquid Density @ 25°C (77°F)	ASTM D 4052	857 kg/m ³ (7.15 lb/gal)
Pseudocritical density		280 kg/m ³ (17.5 lb/ft ³)
Pseudocritical pressure		32.1 bar (465 psia)
Pseudocritical temperature		358 °C (676 °F)
Molecular Weight (Average)		120
Viscosity, Kinematic @ 40°C (104°F)	ASTM D 445	0.779 mm ² /s
@ 100°C (212°F)	ASTM D 445	0.463 mm ² /s
Coefficient of thermal expansion @ 200°C (392°F)		0.00159 /°C (0.000882 /°F)
Heat of Vaporization @ 300°C (572°F)		144 kJ/kg (62.0 Btu/lb)
Minimum liquid temperatures for fully developed turbulent flow (NRe > 10000)		
20 ft/s, 1-in. tube (6.096 m/s, 2.54-cm tube)		<-90 °C (<-130 °F)
10 ft/s, 1-in. tube (3.048 m/s, 2.54-cm tube)		-84 °C (-119 °F)
		<-90 °C (<-130 °F)

Pour Point	ISO 3016	
Autoignition Temperature	DIN 51794	~420 °C (~788 °F)
	ASTM E659	441 °C (826 °F)
Fire Point		
COC	ASTM D92	50 °C (122 °F)
Flash Point		
CC	ASTM D93	38.8 °C (102 °F)
Pumpability		
@ 300mm ² /s (cSt)		<-90 °C (<-130 °F)
Normal Boiling Point		152 °C (306 °F)
Maximum film temperature		320 °C (608 °F)
Recommended Bulk Temperature		300 °C (570 °F)
Composition		Cumene
Appearance		Clear liquid

Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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