EASTMAN

Technical Data Sheet

Therminol® 62 Heat Transfer Fluid

Applications

- Asphalt
- Biomass - orc
- Cement - waste heat recovery + orc
- Chemicals & petrochemicals
- Gas to liquid (gtl)
- Htf - aluminum foil printing
- Htf - bakery
- Htf - production of biodiesel
- Hybrid solar + orc
- Oil or gas processing
- Polymer & plastic
- Solar csp
- Wood panels

Key Attributes

- Fouling Resistant
- Low Pressure
- True 325°C (620°F) Performance

Product Description

Therminol 62 is a synthetic heat transfer fluid whose chemistry is custom contoured for high-performance, high-purity, low-pressure and exceptional thermal stability.

Performance Benefits

- **True 325°C (620°F) Performance—**Users can expect many years of reliable, trouble-free operation, even when operating continuously at the recommended maximum temperature.
- **Low Pressure—**Therminol 62 is designed for typical liquid phase heat transfer fluid systems which operate at low pressures.
- **Fouling Resistant—**Therminol 62 is specifically engineered to resist solids formation and system fouling. Your system will operate more reliably and you will save money.

Typical Properties

Property	Test Method	Typical Value, Units
General		
Appearance		Water-white liquid
Composition		Isopropyl biphenyl mixture
Maximum bulk temperature		325 °C (620 °F)
Maximum film temperature		355 °C (670 °F)
Normal Boiling Point		333 °C (631 °F)
Pumpability		
@300 mm2/s (cSt)		-11 °C (12 °F)
@ 2000 mm2/s (cSt)		-23 °C (-9 °F)
Flash Point		
COC	ASTM D92	171 °C (340 °F)
PMCC	ASTM D93	160 °C (320 °F)
Autoignition Temperature	ASTM E659	407 °C (765 °F)
	DIN 51794	433 °C (813 °F)
Pour Point	ASTM D 97	-42 °C (-44 °F)

Minimum liquid temperatures for fully developed turbulent flow (NRe > 10000)		
10 ft/s, 1-in. tube (3.048 m/s, 2.54-cm tube)		50 °C (122 °F)
20 ft/s, 1-in. tube (6.096 m/s, 2.54-cm tube)		31 °C (88 °F)
Minimum liquid temperatures for transitional region flow, (NRe > 2000)		
10 ft/s, 1-in. tube (3.048 m/s, 2.54-cm tube)		11 °C (52 °F)
20 ft/s, 1-in. tube (6.096 m/s, 2.54-cm tube)		4 °C (39 °F)
Coefficient of thermal expansion		
@ 200°C		0.001000 /°C (0.000556 /°F)
Heat of Vaporization[a]		263.9 kJ/kg (113.6 Btu/lb)
Viscosity, Kinematic		
@ 100°C	ASTM D 445	2.52 cSt, mm^2/s
@ 40°C	ASTM D 445	10.7 cSt, mm^2/s
Liquid Density		
@ 25°C	ASTM D 4052	951.1 kg/m^3 (7.94 lb/gal)
Acidity	ASTM D 664	<0.2 mg KOH/g
Molecular Weight (Average)		252
Pseudocritical temperature		487 °C (908 °F)
Pseudocritical pressure		15.0 bar (217.5 psia)
Pseudocritical density		269.4 kg/m^3 (16.82 lb/ft^3)
Copper Corrosion	ASTM D 130	<<1a
Moisture Content, maximum	ASTM E-203	200 ppm
Dielectric Constant		
@ 23°C	ASTM D-924	2.53
Chlorine	DIN 51577	<10 ppm

[a]*at maximum use temperature*

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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