ENSTMAN

Technical Data Sheet Therminol® 72 Heat Transfer Fluid

Applications

- Chemicals & petrochemicals
- Gas to liquid (gtl)
- Htf production of bioalcohol
- Htf production of biodiesel
- Lube oil refining
- Oil recycling
- Refining
- Soil / waste treatment
- Specialty chemicals
- Styrene
- Tall oil

Key Attributes

- High Temperature Stability
- Non Fouling
- Reduced Operating and Capital Costs

Product Description

Therminol 72 is an ultra-high temperature liquid phase heat transfer fluid having excellent thermal stability. Therminol 72 was developed for use at temperatures up to 380°C (720°F) in liquid phase heat transfer systems.

Performance Benefits

- **High Temperature Stability**—Therminol 72 is ideally suited for high temperature heat recovery applications that also require low temperature fluidity.
- **Reduced Operating and Capital Costs**—The use of Therminol 72 in high temperature heat transfer systems can result in a significant reduction in capital investment, due to reduced freeze-protection requirements and lower pumping energy costs at low temperatures as compared to other very high temperature alternatives.
- **Nonfouling**—Therminol 72 has been carefully formulated to minimize the formation of low boilers and eliminate the risk of insoluble high- boilers formation and fouling. Proper attention to system design and operation within the maximum bulk and film temperatures specified will help ensure reliable operation.

Typical Properties

Property	Test Method	Typical Value, Units
General		
Appearance		Clear, amber liquid
Composition		Mixture of synthetic aromatics
Maximum bulk temperature		380 °C (715 °F)
Maximum film temperature		400 °C (750 °F)
Normal Boiling Point		271 °C (520 °F)
Pumpability		
@300 mm2/s (cSt)		-10 °C (16 °F)
@ 2000 mm2/s (cSt)		-14 °C (7 °F)
Flash Point		
COC	ASTM D92	132 °C (270 °F)
Autoignition Temperature	ASTM E659	603 °C (1117 °F)
	DIN 51794	585 °C (1085 °F)
Pour Point	ISO 3016	-18 °C (0 °F)



Viscosity, Kinematic		
@ 40°C	ASTM D 445	5.74 cSt, mm ² /s
Liquid Density		
@ 15°C	ASTM D 4052	1084 kg/m ³ (9.00 lb/gal)
Acidity	ASTM D 664	<0.2 mg KOH/g
Molecular Weight (Average)		190
Copper Corrosion	ASTM D 130	<<1a
Moisture Content, maximum	ASTM E-203	200 ppm
Dielectric Constant		
@ 23°C	ASTM D-924	3.12

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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