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PRODUCT
INFORMATION

THERMINOL 66 HEAT TRANSFER FLUID

Often quoted as the best thermal fluid available, Therminol 66 is the TFS product of choice in high temperature systems.

Therminol 66 is a reliable high temperature, liquid phase heat transfer fluid. Pumpable at low temperatures and offering high temperature thermal stability, Therminol 66 is a proven fluid, improving operation efficiency.

PERFORMANCE BENEFITS

- **Experience** – Therminol 66 is a reliable high temperature liquid phase heat transfer fluid.
- **Proven Fluid** – Therminol 66 is suitable for a variety of systems and is proven to deliver a high quality and consistent performance when operating continuously at 650° F (345° C).
- **Fouling Resistant** – Therminol 66 is specifically engineered to resist solids formation and system fouling, providing more reliable operation, with potential cost savings.

PRODUCT SPECIFICATION

Appearance	Clear, pale yellow liquid
Composition	Modified terphenyl
Maximum bulk temperature	345°C (650°F)
Maximum film temperature	375°C (705°F)
Normal boiling point	359°C (678°F)
Pumpability, at 300 mm ² /s (cSt)	11°C (52°F)
Pumpability, at 2000 mm ² /s (cSt)	-3°C (27°F)
Flash point, COC (ASTM D-92)	184°C (363°F)
Flash point, PMCC (ASTM D-93)	170°C (338°F)
Autoignition temperature (ASTM E-659)	374°C (705°F)
Autoignition temperature (DIN 51794)	399°C (750°F)
Pour point (ISO 3016)	-32°C (-25°F)
Minimum liquid temperatures for fully developed turbulent flow ($N_{re} > 10000$)	
10 ft/sec, 1 in tube (3.048 m/s, 2.54 cm tube)	72°C (162°F)
20 ft/sec, 1 in tube (6.096 m/s, 2.54 cm tube)	53°C (128°F)
Minimum vapor temperatures for fully developed turbulent flow ($N_{re} > 2000$)	
10 ft/sec, 1 in tube (3.048 m/s, 2.54 cm tube)	35°C (96°F)
20 ft/sec, 1 in tube (6.096 m/s, 2.54 cm tube)	26°C (78°F)
Coefficient of thermal expansion at 100°C	0.000819/°C (0.000455/°F)
Kinematic viscosity at 100°C (ASTM D-445)	3.80 mm ² /s (cSt)
Kinematic viscosity at 40°C (ASTM D-445)	29.6 mm ² /s (cSt)
Liquid density at 15°C (ASTM D-4052)	1012 kg/m ³ (8.44 lb/gal)
Liquid density at 25°C (ASTM D-4052)	1005 kg/m ³ (8.40 lb/gal)
Total acidity (ASTM D-664)	<0.2 mg KOH/g
Average molecular weight	252
Pseudocritical temperature	569°C (1056°F)
Pseudocritical pressure	24.3 bar (353 psia)
Pseudocritical density	317 kg/m ³ (19.8 lb/ft ³)
Copper corrosion (ASTM D-130)	<<1a
Moisture content, maximum (ASTM E-203)	150 ppm
Dielectric constant @ 23°C (ASTM D-924)	2.61

Contact the **TFS Team** today on **+44 (0)1298 815862**
or visit www.thermalfluidsolutions.com