



**THERMAL
FLUID
SOLUTIONS**

www.thermalfluidsolutions.com

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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.



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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

Email the **TFS Team**, office@thermalfluidsolutions.com
or visit www.thermalfluidsolutions.com