



**THERMAL
FLUID
SOLUTIONS**

www.thermalfluidsolutions.com

UK Head Office: 20 Hallsteads,
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PRODUCT
INFORMATION

THERMINOL SP HEAT TRANSFER FLUID

Therminol SP is a synthetic heat transfer fluid used in moderate temperature applications. Designed for use in non-pressurised or low-pressure indirect heating systems, Therminol SP delivers an efficient and dependable performance.

PERFORMANCE BENEFITS

- **Long Life** – You will get years of reliable, cost effective performance, even when operating your system continuously at 290°C (550°F).
- **Excellent Resistance to Fouling** – Therminol SP resists the effects of oxidation up to ten times more than mineral oils, increasing performance.
- **Excellent Low Temperature Pumpability** – Therminol SP is still pumpable at -28°C (-18°F), compared to some mineral oils that will not pump at temperatures below -7°C (20°F). With Therminol SP, your heat transfer fluid system can start-up quickly and easily, increasing operation efficiency.



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PRODUCT SPECIFICATION

Appearance	Clear yellow liquid
Composition	Synthetic hydrocarbon mixture
Maximum bulk temperature	290°C (550°F)
Extended maximum use temperature	315°C (600°F)
Maximum film temperature	335°C (635°F)
Normal boiling point	351°C (664°F)
Pumpability, at 300 mm ² /s (cSt)	-8°C (17°F)
Pumpability, at 2000 mm ² /s (cSt)	-28°C (-18°F)
Flash point, COC (ASTM D-92)	177°C (350°F)
Autoignition temperature (ASTM E-659)	343°C (650°F)
Autoignition temperature (DIN 51794)	366°C (691°F)
Pour point (ISO 3016)	-54°C (-65°F)
Minimum liquid temperatures for fully developed turbulent flow (NRe > 10000)	
10 ft/sec, 1 in tube (3.048 m/s, 2.54 cm tube)	67°C (152°F)
20 ft/sec, 1 in tube (6.096 m/s, 2.54 cm tube)	45°C (114°F)
Minimum liquid temperatures for transitional region flow, (NRe > 2000)	
10 ft/sec, 1 in tube (3.048 m/s, 2.54 cm tube)	24°C (75°F)
20 ft/sec, 1 in tube (6.096 m/s, 2.54 cm tube)	11°C (52°F)
Heat of vaporization at max. use temperature	228 kJ/kg (98.1 Btu/lb)
Kinematic viscosity at 100°C (ASTM D-445)	3.52 mm ² /s (cSt)
Kinematic viscosity at 40°C (ASTM D-445)	19.0 mm ² /s (cSt)
Liquid density at 25°C (ASTM D-4052)	868 kg/m ³ (7.25 lb/gal)
Average molecular weight	320
Pseudocritical temperature	512°C (953°F)
Pseudocritical pressure	13.2 bar (191 psia)
Pseudocritical density	258 kg/m ³ (16.1 lb/ft ³)
Copper corrosion (ASTM D-130)	<< 1 a
Moisture content, maximum (ASTM E-203)	150 ppm
Dielectric constant @ 23°C (ASTM D-924)	2.23

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