



# HEAT TRANSFER FLUIDS

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## XCEL THERM<sup>®</sup> TPL – Typical Properties

Direct replacement for Hydrogenated Terphenyl based heat transfer fluids, chemically equivalent to Dowtherm<sup>™</sup> RP\* and Therminol<sup>®</sup> 66\*. Fouling resistant synthetic for low pressure systems operating up to 650°F (345°C). Recommended for oil and gas processing, chemical manufacturing, refining operations, low pressure thermal fluid systems, bio-products, polymer and resin production and many other applications.

<b>Key Temperatures</b>		
Maximum Bulk Fluid Operating Temperature	650°F	345°C
Maximum Film Temperature	700°F	371°C
Flash Point (PMCC) (ASTM D93) (min)	302°F	150°C
Flash Point (COC) (ASTM D92) (min)	363°F	184°C
Fire Point (ASTM D92) (min)	378°F	192°C
Autoignition Temperature (ASTM E659) (min)	705°F	374°C
Pour Point (ASTM D97) (max)	10°F	-12°C
Pumpability, at 300 cSt	52°F	11°C
Pumpability, at 2000 cSt	27°F	-3°C
Normal Boiling Point	678°F	359°C
Optimum use temperature (min to max)	30 - 650°F	0 - 345°C
<b>Physical Properties</b>		
Appearance	Pale yellow liquid	
Odor	Faint, Characteristic	
Composition	Hydrogenated terphenyl	
Moisture Content (max)	150 ppm	
Density, at 77°F/25°C	8.40 lbs/gal	1,007 kg/m <sup>3</sup>
Specific Gravity, at 68°F/20°C (typical)	1.012	
Kinematic Viscosity, at 104°F/40°C	30.5 cSt	
Kinematic Viscosity, at 212°F/100°C	4 cSt	
Coefficient of Thermal Expansion	0.000455/°F	0.000819°C
Total Acid Number (ASTM D974)	≤ 0.01 mg KOH/g	
Acetone Insolubles	< 10mg/100ml	

\* Data represents typical laboratory samples and are not guaranteed for all samples.

\*Dowtherm is a registered trademark of Dow Chemical  
Therminol is a registered trademark of Eastman Chemical