

HEAT TRANSFER FLUIDS

XCELTHERM[®]HFF – Typical Properties

High flash point of greater than 410°F (210°C) as measured by Pensky-Martens Closed Cup method (ASTM D93), petroleum based, non-toxic for use up to 600°F (315°C). Recommended for use in wood kilns, paper and packaging, wood panel production, marine transportation or any application where a higher than usual flashpoint is required.

Key Operating Temperatures

Maximum Bulk Fluid Operating Temperature	600°F	315°C
Maximum Film Temperature	650°F	345°C
Flash Point (PMCC)(ASTM D93)(min)	440°F	227°C
Flash Point (COC)(ASTM D92)(min)	460°F	238°C
Fire Point (ASTM D92)(min)	505°F	263°C
Autoignition Temperature (min)	660°F	349°C
Pumpability, at 300 cSt	32°F	0°C
Pour Point (ASTM D97)	-5.8°F	-21°C
Normal Boiling Point	635°F	353°C

Physical Properties

Appearance	Straw yellow to amber liquid		
Odor	Faint petroleum		
Composition	Distillates (petroleum), solvent-dewaxed heavy paraffinic		
Average Molecular Weight	550 g/mol		
Density at 77°F/25°C	7.27 lbs/gal	871 kg/m3	
Specific Gravity, at 60°F/15.6°C	0.880		
Moisture Content (maximum)	300 ppm		
Kinematic Viscosity at 104°F/40°C	37 cSt		
Kinematic Viscosity at 212°F/100°C	5.5 cSt		
Coefficient of Thermal Expansion at 392°F/200°C	0.000517/°F	0.000931/°C	
Heat of Vaporization at Maximum Use Temperature BTU/Ib	77 BTU/Ib		
* Data represents typical laboratory samples and are not guaranteed for all samples			