## **Cinntherm HTF 50**

Cinntherm HTF 50 is a liquid phase, heat transfer fluid that can be used at high operating temperatures and low pressure for demanding applications. It is recommended for chemical refining, oil and glycol recovery units, chemical processing, gas processing, petrochemical plants and many other applications.

## **Key Operating Temperatures Maximum Bulk Fluid Operating Temperatures**

Maximum bulk fluid operating temperature	675°F / 357°C
Maximum Film Temperature	725°F / 385°C
Freezing/melting point	-11.2°F / -24°C
Flash Point, PMCC (ASTM D93) minimum	327°F / 164°C
Flash Point, COC (ASTM D92) minimum	345°F / 174°C
Fire Point (ASTM D92) minimum	374°F / 190°C
Autoignition Temperature, minimum	779°F / 415°C
Pumpability at 300 cSt	14°F / -10°C
Initial boiling point	>536°F / >280°C

## **Physical Properties**

Appearance	Water-white, clear liquid
Odor	Mild
Composition	Methylethylated aromatic mixture
Average molecular weight	252 g/mol
Density at 77°F / 25°C	7.98 pounds per gallon
Specific Gravity at 77°F / 25°C	0.91 – 1.10
Moisture content, maximum	200 ppm
Critical temperature	908.3°F / 468.8°C
Critical pressure	217.5 psia
Critical density	16.82 #/ft <sup>3</sup>
Viscosity at 40°C	11 cSt
Viscosity at 100°C	2.4 cSt
Coefficient of thermal expansion	0.000556°F or 0.00100°C
Heat of vaporization at maximum use	113.6 BTU/# or 264.2 kJ/kg
Total acid number (ASTM D664)	<=0.01 mg KOH/gram