

Syltherm 800



Silicone Heat Transfer Fluid

SYLTHERM** 800 heat transfer fluid is a highly stable, long-lasting silicone fluid designed for high temperature liquid phase operation. It exhibits low potential for fouling and can often remain in service for 10 years or more. SYLTHERM 800 has essentially no odor, is low in acute oral toxicity, and is not listed as reportable under SARA Title III, Section 313(1).

Recommended use temperature range: -40 °F to 750 °F (-40 °C to 400 °C)

Typical Properties of SYLTHERM 800 Fluid

Color

After Extended Use: Darkened

As Supplied: Clear Yellow

Composition: Dimethyl polysiloxane

Property	English Units	SI Units	English Units	SI Units
Viscosity at 77 °F (25 °C)	≥ 6.0 cps	≥ 6.0 mPa-s	9.1 cps	9.1 mPa-s
Flash Point, Closed Cup (b)	≥ 95°F	≥ 35°C	320°F	160°C
Flash Point, Open Cup (c)	≥ 135°F	≥ 57°C	350°F	177°C
Autoignition Point, ASTM D-2155	725°F	385°C	725°F	385°C
Acid Number, Typical		0.03		0.03
Freeze Point	≤ -40°F	≤ -40°C	-76°F	-60°C
Density at 77 °F (25 °C)	7.8 lb/gal	936 kg/m ³	7.8 lb/gal	936 kg/m ³
Specific Gravity at 77 °F (25 °C)		0.93		0.93
Heat of Combustion	12,300 Btu/lb	28,659 kJ/kg	12,300 Btu/lb	28,659 kJ/kg
Estimated Critical Temperature	692°F	367°C	692°F	367°C
Estimated Critical Pressure	10.8 atm	10.9 bar	10.8 atm	10.9 bar
Estimated Critical Volume	0.0515 ft ³ /lb	3.22 l/kg	0.0515 ft ³ /lb	3.22 l/kg

a) Not to be construed as specifications

(b) ASTM D92

(c) ASTM D93