

Dowtherm Q



Synthetic Organic Heat Transfer Fluid

DOWTHERM* Q heat transfer fluid contains a mixture of diphenylethane and alkylated aromatics. Compared to hot oils, it exhibits better thermal stability, particularly at the upper end of hot oils' use range, and significantly better low-temperature pumpability.

Recommended use temperature range: -30 °F to 625 °F (-35 °C to 330 °C)

Suitable applications: as an alternative to hot oils in liquid phase heat transfer applications

Typical Properties of Dowtherm Q Fluid(a)

DOWTHERM Q Heat Transfer Fluid

Composition: Mixture of Diphenylethane and Alkylated Aromatics

Color: Clear to light yellow

Property	English Units	SI Units
Temperature Range	-30 to 625 °F	-35 to 330 °C
Atmospheric Reflux Boiling Point	513°F	267°C
Flash Point (b)	249°F	120°C
Fire Point (c)	255°F	124°C
Autoignition Temperature(d)	773°F	412°C
Film Coefficient, (Btu/(hr)(ft ²)(°F))W/m ² K (e)	563	295
Flammability Limits of Vapor in Air		
Upper Flammability Limit, 5.5 Vol. percent in Air	375 °F	190°C
Lower Flammability Limit, 0.55 Vol. percent in Air	275 °F	135 °C
Estimated Critical Temperature	912 °F	489 °C
Estimated Critical Pressure	23.7 atm	24 bar
Estimated Critical Volume	0.0522 ft ³ /lb	3.258 l/kg
Molecular Weight (average)	190	

(a) Not to be construed as specifications.

(b) Closed Cup

(c) C.O.C.

(d) ASTM E659-78

(e) Design Conditions: 550°F; V = 8 ft/sec, D = 1"

