

TRIBOLUBE[®] F-197

Synthetic Perfluoro Polyether Lubricant

CHARACTERISTICS

TRIBOLUBE F-197 Tribolube F-197 (perfluoro polyether) is a high performance, inert fluid suitable for use in testing and heat transfer applications requiring:

- * High thermal stability
- * Extreme chemical inertness
- * Low pour point
- * Exact boiling point
- * No flash point
- * Low toxicity
- * Good dielectric properties
- * Compatibility with metals and elastomers

APPLICATIONS

Tribolube F-197 with its low boiling point and high purity make it especially suitable for various heat transfer applications including direct immersion cooling. Additionally Tribolube F-197 is an excellent solvent for removing PFPE greases from surfaces. It is compatible with most plastics, elastomers and metals under normal operating temperatures. Although newly exposed surfaces of aluminum, titanium and magnesium under certain conditions may cause depolymerization of perfluoroether oils.

PERFORMANCE TEST	CONDITION	TYPICAL VALUES
Typical Boiling Point	°C	70
Pour Point	°C	-115
Density	g/cm ³	1.68
Kinematic Viscosity	@ 20°C	0.54
Vapor Pressure	@ 25°C torr	165
Specific Heat	25°C cal/g	0.23 cal/g
Heat of Vaporization	cal/g	17 cal/g
Thermal Conductivity	W/(cm)(°C)	0.0007
Coef. of Expansion	cm ³ /(cm ³)(°C)	0.0011
Surface Tension	dynes/cm	14
Refractive Index	@ 25°C	1.280
Dielectric Strength	@ 25°C KV (2.54 mm gap)	40
Dielectric Constant	@ 25°C (1 KHz)	2.1
Dissipation Factor	@ 25°C (1 KHz)	2 x 10 ⁻⁴
Volume Resistivity	@ 25°C ohm-cm	1 x 10 ¹⁵
Solubility of Water	ppm (wt)	14
Solubility of Air	cm ³ gas/100 cm ³ liquid	26

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