

TRIBOLUBE[®] F-193

Synthetic Perfluoro Polyether Lubricant

CHARACTERISTICS

TRIBOLUBE F-193 Perfluoropolyether oil is high performance oil designed for applications in harsh environments where non-reactivity with strong oxidizers, insolubility in solvents, radiation resistance, and has an operating temperature of -40°F to 300°F. Tribolube F-193 oil has an excellent viscosity index and low temperature properties.

APPLICATIONS

Tribolube F-193 is an excellent lubricant for high speed precision bearings and electrical contacts and is insoluble in most organic solvents, but is soluble in highly fluorinated solvents. 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	TEST METHOD	CONDITION	TYPICAL VALUES
Specific Gravity	Mohr Westphal	60 °F	1.89 ± 0.05g/cc
Viscosity index	ASTM-D-2270		122
Pour point	ASTM-D-97		-40 °C
Kinematic viscosity	ASTM-D-445	@ -60 °C	NA
		@ -40 °C	NA
		@ 20 °C	190 cSt
		@ 40 °C	65.6 cSt
		@ 100 °C	9.4 cSt
Evaporation	ASTM-D-2595	@ 60 °C, 22 hr.	1.7 %
		@ 120 °C, 22 hr.	17%
Load Wear Index	ASTM-D-2596	Init. Seiz. load	NA
		Welding load	400 kg
		Mean hertz load	105
Four Ball Wear	ASTM-D-4172B	Avg. scar diameter	0.7 mm
Surface Tension	DuNouy Tensionmeter	@ 68 °F	23 dynes/cm
Flash & Fire Point	ASTM-D-92-66		None
Approximate ISO Grade		@ 68 °F	68
Copper Corrosion	FED-STD-791 Method 5309	24 hrs @ 212°F	1a, No stain

Aerospace Lubricants, Inc.

1600 Georgesville Road, Columbus, Ohio 43228
(614) 878-3600 (800) 441-9160 Fax (614) 878-1600
www.aerospace lubricants.com