

TRIBOLUBE[®]-16

Fluorinated Polyether Greases

CHARACTERISTICS

Tribolube-16 is a wide temperature range grease especially useful in vacuum and other systems where nonreactivity with chemicals, strong acids and oxidizers, fuels, and solvents is required. **Tribolube-16** meets the qualification requirements of MIL-PRF-27617F - Types 2 & 3. Although this lubricant is very inert, newly exposed rubbing surfaces of aluminum and magnesium may react with the greases under certain conditions.

APPLICATIONS

This grease is suitable in applications including small and large diameter ball, roller, needle, and plain bearings, electrical contacts, threads, valves, gears, contacts, splines, ball screws, and screw actuators. It is compatible with most elastomers and plastic seals, gaskets and O-rings.

PERFORMANCE TEST	TEST METHOD	CONDITION	TYPICAL VALUES
Temperature Range			-45° to 400°F
NLGI Number			2
Unworked Penetration	ASTM D-1403	@ 77°F	299
Worked Penetration	ASTM D-1403	60 Strokes	300
Oil Separation	FED-STD-791 Method 321	30 hrs @ 400°F	10.45%
Evaporation	ASTM D-2595	22 hrs @ 350°F	1.00%
		22 hrs @ 400°F	5.30%
Low Temperature Torque	ASTM D-1478	@ -30°F, starting	1,885 gm-cm
		60 min running	1,235 gm-cm
		@ -40°F, Starting	6,500 gm-cm
		60 min running	2,925 gm-cm
		@ -45°F, starting	16,575 gm-cm
		60 min running	14,300 gm-cm
Copper Corrosion	FED-STD-791 Method 5309	24 hrs @ 212°F	1a
Load Wear Index	ASTM D-2596		135
Last Non-seizure		Load/Wear Scar	NR
Last seizure		Load/Wear Scar	500 kg/1.31mm
Weld Point		Load	620 kg
Steel-on-Steel Wear	ASTM D-2266	1200 rpm, 40 kg, 1 hrs @ 400°F, 52100 steel	1.07 mm
High Temperature Performance	ASTM D-3336	20,000 rpm @ 400°F, 5 lb. load	>600 hrs
		10,000 rpm @ 400°F, 5 lb. load	>2,000 hrs
		10,000 rpm @ 425°F, 5 lb. load	>2,000 hrs
Film Stability & Steel Corrosion	MIL-PRF-27617	168 hrs @ 212°F	Pass
Water Washout	ASTM D-1264	1 hrs @ 105°F	0.8%
Resistance to Aqueous Solution	FED-STD-791 Method 5415	168 hrs @ 77°F	Pass
LOX Impact Sensitivity	ASTM D-2512	20 impacts from 1,100 mm	No Reaction
Fuel Stability	FED-STD-791 Method 5414	@ 77°F	0.20%
Fuel Resistance		8 hrs @ 77°F	Pass
Vapor Pressure	Knudsen		10-6 Torr

Extending Component Life with Tribolube Synthetic Lubricants[®]