

Fluorinated Polyether Greases

CHARACTERISTICS

TRIBOLUBE-71 primary characteristic is that it uses PTFE that has not been irradiated. Non-irradiated PTFE over long term exposure has demonstrated it does not corrode aluminum or anodized aluminum. Tribolube-71 has a very wide temperature range, nonreactive with strong acids, oxygen, fuels, and solvents. It is an excellent anti-wear, extreme pressure lubricant with long life. Tribolube-71 is qualified to MIL-PRF-27617 types 1, 2, & 3.

APPLICATIONS

TRIBOLUBE-71 is intended for use in scuba applications as well in small and large diameter ball, roller, needle, and plain bearings, threads, valves, gears, and screw actuators. It is compatible with most elastomers and plastic seals, gaskets and O-rings. Although this lubricant is very inert, newly exposed rubbing surfaces of aluminum and magnesium may react with the greases under certain conditions.

PERFORMANCE TEST	TEST METHOD	CONDITION	TYPICAL VALUES
Temperature Range			-100° to 450°F
NLGI Number			1
Unworked Penetration	ASTM D-1403	@ 77°F	294
Worked Penetration	ASTM D-1403	60 Strokes	299
Oil Separation	FED-STD-791 Method 321	30 hrs @ 300°F	9.20%
		30 hrs @ 350°F	10.53%
		30 hrs @ 400°F	11.7%
Evaporation	ASTM D-2595	22 hrs @ 400°F	0.7%
		22 hrs @ 450°F	2.88%
Low Temperature Torque	ASTM D-1478	@ -65°F, starting	553 gm-cm
		60 min running	293 gm-cm
		@ -75°F, Starting	910 gm-cm
		60 min running	260 gm-cm
		@ -100°F, starting	3,835 gm-cm
60 min running	1,073 gm-cm		
Copper Corrosion	FED-STD-791 Method 5309	24 hrs @ 212°F	1b
Load Wear Index	ASTM D-2596		144.34
Last Non-seizure		Load/Wear Scar	None
Last seizure		Load/Wear Scar	620 kg/ 1.87 mm
Weld Point		Load	800 kg
Steel-on-Steel Wear	ASTM D-2266	1200 rpm, 40 kg, 1 hrs @ 167°F, 52100 steel	1.02 mm
		1200 rpm, 40 kg, 1 hrs, @ 400°F 52100 steel	1.09 mm
High Temperature Performance	ASTM D-3336	10,000 rpm @ 400°F 5 lb. load	+2,800 hrs
Film Stability & Steel Corrosion	Mil-G-27617D	168 hrs @ 212°F	Pass
Water Washout	ASTM D-1264	1 hrs @ 105°F	0.1%
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	@ 77°F	0.20%
Fuel Resistance	Method 5414	8 hrs @ 77°F	Pass
Oxidation Stability	ASTM D-942	100 hrs @ 212°F	-1 psi
		500 hrs @ 212°F	-1.5 psi