

TRIBOLUBE-15V

Fluorinated Polyether Grease

CHARACTERISTICS

These greases are especially useful in vacuum and other systems where nonreactivity with chemicals, strong acids and oxidizers, fuels, and solvents is required.

Although this lubricant is very inert, newly exposed rubbing surfaces of aluminum and magnesium may react with the greases under certain conditions.

APPLICATIONS

Tribolube-15V is recommended for vacuum applications. Please consult with an ALI lubrication engineer to select the correct one for your application. These greases are 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				-100°F to 450°F		-100°F to 450°F	
NLGI No.				2		2	
Unworked Penetration	ASTM D-1403	@ 77°F		291		292	
Worked Penetration	ASTM D-1403	60 Strokes		293		295	
Oil Separation	ASTM D-6184	30 hrs @ 400°F		10.7%		11.2%	
		30 hrs @ 450°F		14.6%			
Evaporation	ASTM D-2595	22 hrs @ 400°F		.27%			
		30 hrs @ 400°F				0.08%	
		22 hrs @ 450°F					
		72 hrs @ 450°F					
		22 hrs @ 500°F					
Rust Preventative Properties	ASTM D-1743	48 hrs @ 125°F					
Low Temperature Torque	ASTM D-1478	@ -80°F, Starting		870 gm-cm		@ -65 910 gm-cm	
		Running		300 gm-cm		390 gm-cm	
		@ -100°F, Starting		2055 gm-cm		3,185 gm-cm	
		10 min Running					
		60 min Running		767 gm-cm		975 gm-cm	
Copper Corrosion	ASTM D-4048			1A			
LOX Impact Sensitivity	ASTM D-2512	20 impacts from 43.3 in				No Reaction	
Load Wear Index	ASTM D-2596					152.25	
Last Non-seizure		Load/Wear Scar				40 kg/0.40 mm	
Last Seizure		Load/Wear Scar				800 kg/1.52 mm	
Weld Point		Load				1,000 + kg	
Steel-on-Steel Wear	ASTM D-2266	1200 rpm, 40 kg, 1 hr @ 167°F, 52100 Steel		1,119		0.90 mm	
		1200rpm, 40 kg, 1 hr @ 400°F 52100 Steel				1.33 mm	
High Temperature Performance	ASTM D-3336	10,000 rpm @ 400°F 5 lbs				1,800 + hrs	
		10,000 rpm @ 450°F 5 lbs				500 + hrs	
Film Stability and Corrosion	FED STD-791 Method 5414	168 hrs @ 212°F				Pass	
Vapor Pressure	Knudsen	@ 68°F				10 -12 Torr	
Dropping Point	ASTM D-2265					438°F	
Vacuum Thermal Stability	NASA SP-R-0022A	24 hrs@ 6 X 10 ⁻⁶ Torr					
Weight Loss						0.07%	
Volatile Condensables							0.00%
Water Vapor Recovery							0.01%