## Synthetic Hydrocarbon Greases

## **CHARACTERISTICS**

**Tribolube-11** is a multipurpose synthetic grease which has very low start/run torque properties at -100°F, and provides excellent antiwear and high-load carrying capacity. It also has excellent antiseize properties. Molybdenum disulfide solid lubricant is used in this grease to enhance the extreme pressure properties and help absorb shock loads. Conforms to the performance requirements of MIL-PRF-21164.

## **APPLICATIONS**

Tribolube-11 is appropriate for use in heavily loaded sliding steel surfaces such as turbine engine accessory splines, and highly loaded antifriction bearings where a grease containing molybdenum disulfide is required.

PERFORMANCE TEST	TEST METHOD	CONDITION	TYPICAL VALUES
Temperature Range			-100 to 250°F
NLGI No.			2
Unworked Penetration	ASTM D-217	@77°F	278
Worked Penetration	ASTM D-217	60 strokes	286
Worked Stability	FED-STD-791	100,000 strokes	271
	Method 313		
Dropping Point	ASTM D-2265		>450°F
Evaporation	ASTM D-2595	22 hrs @ 210°F	0.90%
		22 hrs @ 300°F	1.40%
Oil Separation	FED-STD-791	30 hrs @ 210°F	3.88%
	Method 321	30 hrs @ 350°F	4.10%
Water Washout	ASTM D-1264	24 hrs @ 105°F	3.60%
Oxidation Stability	ASTM D-942	100 hrs @ 212°F	-8.0 psi
		500 hrs @ 212°F	-12.0 psi
Rust Preventative	ASTM D-1743	48 hrs @ 125°F	1
Properties			
Load Wear Index	ASTM D-2596		60.96
LastNon-seizure		Load/Wear Scar	80 kg/ 0.41mm
Last Seizure		Load/Wear Scar	315 kg/2.30 mm
Weld Point		Load	400 kg
Steel-on-Steel	ASTM D-2266	1,200 rpm, 40 kg,	0.74 mm
Wear		2 hrs @ 167°F,	
		52100 Steel	
		1,200 rpm, 40 kg,	1.12 mm
		2 hrs @ 350°F,	
		52100 Steel	
MoS <sub>2</sub> Content	FED-STD-791		
	Method 3722		4.60%
High Temperature	ASTM D-3336	250°F, 10,000 rpm, 5 lb	2,000 hrs +
Performance		300°F, 10,000 rpm, 5 lb	800 hrs +
Low Temperature	ASTM D-1478	@ -100°F, Starting	4,130 gm-cm
Torque		running	735 gm-cm
Corrosion on Copper	ASTM D-4048	24 hrs @ 212°F	1a no Stain

## Extending Component Life with Tribolube Synthetic Lubricants®