

# TIOLUBE MZ-77

## SOLID FILM LUBRICANT

### MEETS "REACH" MATERIAL REQUIREMENTS

Tiodize newly developed solid film lubricant was formulated to meet the changing and demanding requirements of the "REACH" program. Years of experience and competent research and production staff permitted it's development.

### MEETS SPECIFICATIONS:

- No Antimony Trioxide
- No Lead or Lead Compounds
- No Metallics
- AS 6449 POTABLE WATER
- AS5272 TYPE I & TYPE II
- AS1701 TYPE I
- MIL-L-46010
- MIL-L-8937

### PHYSICAL PROPERTIES

Color / Appearance:	Grey/Black
Lubricative Pigment:	Molybdenum Disulfide
Operative Temperature:	-65° F to 550° F
Salt Spray: ASTM B117=	100 hours (Passes) (.0005 in. Coating Thickness)
Coverage:	800 sq. ft. Per Gallon @ 0.0005 Thickness
Recommended Cure:	Air dry 30 minutes, then bake at 400° F one hour
Recommended Thickness:	0.0002 to 0.0005 inches
Shelf Life (Bulk):	One Year

### ENDURANCE LIFE

#### PIN & V- FALEX BLOCKTESTER

PIN:	SAE 3135, RB 87-90 Block AISI-C1137, RC 20-24
Pretreatment:	Grit blast using 220 Aluminum Oxide
Load:	4500 lb. Gage/1000 lb. Load
Speed:	290RPM
Wear Life:	Greater than 420 minutes (Steel vs. Steel)

### FLUID RESISTANCE

1. Anti-Icing Fluid	MIL-A-8243	PASS
2. Reagent Water	ASTM D1193, Type III	PASS
3. Cleaning Compound, Solvent	MIL-C-372	PASS
4. Substitute Ocean Water	ASTM D 1141	PASS
5. Hydraulic Fluid, Synthetic Base	MIL-H-46170	PASS
6. Turbine Fuel, Kerosene Type	MIL-DTL-83133, JP-8	PASS
7. Lubricating Oil, Aircraft Turbine	MIL-PRF-23699	PASS
8. Damping Fluid, Silicone Base	VV-D-1078	PASS
9. Lubricant, Semi-Fluid	MIL-L-46000	PASS
10. Lubricant, Cleaner, Preservative	MIL-PRF-63460	PASS
11. Lubricating Oil, Low Temp.	MIL-L-14107	PASS
12. Lubricant, All Weather	MIL-PRF-85336	PASS

### LFW-1

#### BLOCK & RING

**Oscillatory Wear Life:**  
 5 Fretting Wear  
 Titanium Ring and Block.  
 21,500 Cycles on LFW-1 Tester @ 98KSI  
 (510 lbs.) Load