Technical Data

Everlube® 9002

Everlube® Products Surface Technologies Division

Water Based, MoS₂ Solid Film Lubricant

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Product Description

Everlube 9002 is a low VOC MoS₂ based solid film lubricant with a high molecular weight epoxy binder system. This coating provides excellent wear life, abrasion resistance, good chemical resistance, and performs the best in higher load carrying applications. Everlube 9002 is approved/qualified to many aerospace and industrial specification; approvals can be verified at http://www.everlubeproducts.com/specifications.php. When requesting pricing or ordering of product, listing of the specification and revision is required to assure product/certification compliance.

Features <i>l</i>	Benefits
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- Excellent wear life
- Excellent abrasion resistance

- · Very good chemical resistance
- Lead free

Markets

- Aerospace/Defense
- Industrial machinery and equipment
- Mechanical components
- Fasteners

Typical Applications

- Virtually all fasteners
- Bearings and cams
- Gears and spines
- Engine ring seals

Physical Properties

Lubricating Solids:

Binder:

Color and Appearance:*

Carrier:

Solids (by weight):*

Density:*

Flash Point:

Volatile Organic Compound:

Volatile Organic Compount

Theoretical Coverage:¹
Alternative or Repair Coatings:

 MoS_2

High molecular weight epoxy

Gray/dark gray matte finish

Water based

40% to 44%

 10.9 ± 0.5 lb/gal (1270 \pm 60 grams/liter)

>200°F (93°C)

183 grams/liter (1.52 lb/gal)

698 ft²/gal@ 0.5 mils (17.1 m²/liter @ 12.7 microns)

Solvent based equivalents for Everlube 9002 are our

Everlube 620C, Lube Lok 5306, and Everlube 731. For touch-up applications, Perma-Slik® G or Lubri-

Bond® 220 works well with Everlube 9002.

Processing Information

Dry Film Thickness 0.2 to 0.5 mils (5 to 13 microns)

Dilution/Cleanup Solvent: May be thinned with deionized water less than 10%

by volume

Dilution Ratio: 0 to 9:1 (product to diluent)

Cure Cycle: 1 hr. ± 15 min. @ 400°F (recommended)

or 2 hrs @ 300°F (for substrates that cannot take

recommended cure.

Suggested Pretreatment: Grit blast and/or phosphate

Suggested application Methods: Dip spin, brush or spray

For additional information, please see Processing Bulletin #3001-A

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Typical Functional Properties						
	ASTM Test Method		<u>Value</u>			
Corrosion Resistance						
Test Panel	ASTM B-117		>100 hrs. @ 5% neutral salt spray			
Test Panel Coating Method			0.8 mil on grit blasted steel panel			
Abrasion Resistance	ASTM D-4060		Excellent			
Coefficient of Friction	ASTM D-2714		0.04 to 0.06			
Operating Temperature Range			-100°F to 400°F (-	73°C to 204°C)		
Load Carrying Capacity	ASTM 2625, method B		>250,000 psi			
Wear Life	ASTM 2625, Method A		>450 minutes			
Chemical Resistance (ASTM D-2510, Method C)						
Isopropyl Alcohol or Ethyl Alcohol	Pass	Diethanola	Diethanolamine Pass			
Mineral Spirits or Paint Thinner	Pass	Hydrochlo	Hydrochloric Acid (10%) Pass			
Toluene	Pass	Sodium H	Sodium Hydroxide (10%) Pass			

Distilled Water

Jet Fuels (JP-4)

Trichloroethylene

Pass

Pass

Pass

Note: Chemical resistance may vary depending on the cure cycle. N/R = not recommended

Pass

Pass

Pass

Pass

Additional Information

Shelf Life and Storage:

One year from date of shipment, stored in a factory sealed container between the temperatures, 40°F to 100°F. Coatings are thermally stable, but we do not recommend prolonged exposure outside of the specified temperature range listed above

Packaging: Everlube 9002 is available is gallon, 5-gallon pail, and quart

Warranty:

Acetone

Skydrol 500

Hydraulic Fluids

Anti-Icing Fluids

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^{*} These tests are performed on each production lot

¹ Based on 100% transfer efficiency at a dry film thickness of 0.0005 inch (12.5 microns).