Technical Data

Everlube® 6112

MoS₂, Solid Film Lubricant



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Product Description

Everlube 6112 is a thermally cured, MoS2 based solid film lubricant with a high molecular weight epoxy binder system. This coatings provides excellent wear resistance in almost any environment. Along with its wear resistance, Everlube 6112 is ideal for applications where an abrasion and corrosion resistant coating is needed. Everlube 6112 also offers excellent barrier protection from harsh chemicals and solvents.

Features / Be	nerits
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- Excellent wear resistance
- Excellent abrasion resistance

- Very good corrosion resistance
- Very good chemical resistance

Markets Typical Applications

- Industrial Machinery
- Mechanical Components
- Fabricated Metal Parts
- Automotive

- Pumps and valves
- Actuator stems and shafts
- Slides, guides and rails
- Dampers, tubes and tracks

Physical Properties

Lubricating Solids MoS₂

Binder Epoxy

Color and Appearance* Matt Gray/Black

Carrier Solvent borne

Solids (by weight)* 53% - 57%

Density* $10.2 \pm 0.5 \text{ lb/gal (1222 \pm 60 grams/liter)}$

Flash Point 24°F (-4°C)

Volatile Organic Compound 454 grams/liter (3.78 lb/gal)

Theoretical Coverage¹ 1090 ft²/gal @ 0.5 mils (26.7 m²/liter @ 12.7 microns)

Alternative or Repair Coatings N/A

Processing Information²

Dry Film Thickness 0.2 to 0.7 mil (5 to 18 microns)

Dilution / Cleanup Solvent² MEK or 642 Solvent

Dilution Ration 1:1 to 1:3 (product to solvent) by volume

Cure Cycle² 1 hr @ 375°F

Suggested Pretreatment Grit blast and/or phosphate

Suggested Application Method Spray/Dip Spin

For additional information, please see Processing Bulleting #3000-A

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Typical Functional Properties				
	ASTM Test Method	<u>Value</u>		
Corrosion Resistance				
Test Panel	ASTM B117	>500 hrs. @ 5% neutral salt spray		
Test Panel Coating Method		0.5 mil on grit blasted steel panel		
Abrasion Resistance	ASTM D4060	Excellent		
Coefficient of Friction	ASTM D2714	.04 to .06		
Operating Temperature Range		-200° to 450°F (-129° to 232°C)		
Load Carrying Capacity	ASTM 2625, Method B	> 250,000 psi		
Wear Life	ASTM 2625, Method A	495 min.		
Chemical Resistance (ASTM D-2510, Method C)				

Chemical Resistance (ASTM D-2510, Method C)					
Isopropyl Alcohol or Ethyl Alcoh	nol Pass	Diethanolamine	Pass		
Mineral Spirits or Paint Thinner	Pass	Hydrochloric Acid (10%)	Pass		
Toluene	Pass	Sodium Hydroxide (10%)	Pass		
Acetone	Pass	Distilled Water	Pass		
Skydrol 500	Pass	Jet Fuels (JP-4)	Pass		
Hydraulic Fluids	Pass	Trichloroethylene	Pass		

Anti-Icing Fluids Pass

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

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 6112 is available in 5-gallon pail, Gallon, Quart

Warranty:

No representation of warranty is expressed or implied and all warranties including warranties of marketability and fitness for use are expressly disclaimed. Nothing herein shall be construed as permission or recommendation to practice a patented invention without a license.

- * 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).
- ² Contact Technical Services for additional options
- ³ Specific chemicals tested per the specification requirements.

Issue Date: 06/11/03, Latest Revision Date: 10/16/03