

## Technical Data

# Everlube<sup>®</sup> 812

MoS<sub>2</sub>, Solid Film Lubricant

**CURTISS -  
WRIGHT**

**Everlube<sup>®</sup> Products**

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### Product Description

Everlube 812 is a thermally-cured, MoS<sub>2</sub> based solid film lubricant with a sodium silicate binder system. This coating is specifically designed to provide lubrication in higher temperature applications. Everlube 812 provides a low coefficient of friction and good wear life, even at elevated temperatures. Specifications for Everlube 812 can be found at: <http://www.everlubeproducts.com/specifications.php>

### Features / Benefits

- Excellent thermal stability
- Excellent stability in vacuum
- Good wear life
- Ideal for higher load carrying applications

### Markets

- Aerospace/Defense
- Fasteners
- Mechanical Components
- Chemical Processing

### Typical Applications

- Bearing guides and races
- Threaded connectors and disconnects
- Bushings, rotary joints, and cams
- Rings and Seals

### Physical Properties

Lubricating Solids:	MoS <sub>2</sub>
Binder:	Sodium Silicate
Color and Appearance:*	Bluish-Black Finish
Carrier:	Water-borne
Solids (by weight):*	29.5% to 33.5%
Density:*	10.9 ± 0.5 lb/gal (1306 ± 60 grams/liter)
Flash Point:	None
Volatile Organic Compound:	0 grams/liter (0 lb/gal)
Theoretical Coverage: <sup>1</sup>	320 ft <sup>2</sup> /gal @ 0.5 mils (7.8 m <sup>2</sup> /liter @ 12.7 microns)
Alternative or Repair Coatings:	For touch-up applications, Perma-Slik RMAC works well with Everlube 812.

### Processing Information

Dry Film Thickness	0.3 to 1 mils (8 to 25 microns)
Dilution/Cleanup Solvent:	N/A - May be thinned with Deionized Water less than 10% by volume.
Dilution Ratio:	< 10% by volume
Cure Cycle:	2 hr. @ 175°F then 2 hrs. @ 400°F
Suggested Pretreatment:	Grit blast
Suggested application Methods:	Dip spin / spray

For additional information, please see Processing Bulletin #3002

**Typical Functional Properties**

	<u>ASTM Test Method</u>	<u>Value</u>
Corrosion Resistance		
Test Panel	ASTM B-117	24 to 72 hours
Test Panel Coating Method		0.5 mil on grit blasted steel panel
Abrasion Resistance	ASTM D-4060	Fair
Coefficient of Friction	ASTM D-2714	0.04 to 0.06
Operating Temperature Range		-365° to 750°F (-221° to 399°C)
Load Carrying Capacity	ASTM 2625, method B	>250,000 psi
Wear Life	ASTM 2625, Method A	>30 minutes

**Chemical Resistance (ASTM D-2510, Method C)**

Isopropyl Alcohol or Ethyl Alcohol	Pass	Diethanolamine	Pass
Mineral Spirits or Paint Thinner	Pass	Hydrochloric Acid (10%)	N/R
Toluene	Pass	Sodium Hydroxide (10%)	N/R
Acetone	Pass	Distilled Water	N/R
Skydrol 500	N/R	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 812 is available in gallon, 5-gallon pail, and quart

Warranty:

No representation or 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

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

Issue Date: 09/28/04 Rev: 01/17/17

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