

Technical Data

Everlube[®] 811

Water Based, MoS₂/Graphite Solid Film Lubricant

**CURTISS -
WRIGHT**

Everlube[®] Products

Surface Technologies Division

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Product Description

Everlube 811 is a low VOC, thermally cured, MoS₂/Graphite based solid film lubricant which utilizes a silicate binder system. This coating provides excellent thermal stability, very good chemical resistance, is lead free, and performs best in higher load carrying applications. Everlube 811 is approved/qualified to many aerospace and industrial specification; these listings 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 / Benefits

- Excellent thermal stability
- Excellent coefficient of friction
- Good wear life and higher load carrying capacity
- Lox Compatible

Markets

- Aerospace/Defense
- Mechanical Components
- Industrial Machinery & Equipment
- Chemical Processing

Typical Applications

- Threaded connectors and disconnects
- Rings and seals
- Virtually all fasteners
- Bushings, rotary joints, cams and pins

Physical Properties

Lubricating Solids:	MoS ₂ , Graphite
Binder:	Silicate
Color and Appearance:*	Matte Gray Finish
Carrier:	Water borne
Solids (by weight):*	51% to 55%
Density:*	13.6 ± 0.5 lb/gal (1630 ± 60 grams/liter)
Flash Point:	None
Volatile Organic Compound:	0 grams/liter (0 lb/gal)
Theoretical Coverage: ¹	936 ft ² /gal @ 0.5 mils (22.9 m ² /liter @ 12.7 microns)
Alternative or Repair Coatings:	Solvent based alternatives for Everlube 811 is our Everlube 810. For touch-up applications, Perma-Slik RAC works well with Everlube 811.

Processing Information

Dry Film Thickness	0.2 to 0.6 mils (5 to 15 microns)
Dilution/Cleanup Solvent:	Deionized Water
Dilution Ratio:	Concentrate to 1:1 (Product to Solvent)
Cure Cycle:	2 hr @ 175 °F +/- 25 °F, then 2 hr. @ 400 °F +/- 25 °F
Suggested Pretreatment:	Grit blast
Suggested application Methods:	spray

For additional information, please see Processing Bulletin #3002

Everlube 811

Page 2

Typical Functional Properties

	<u>ASTM Test Method</u>	<u>Value</u>
Corrosion Resistance		
Test Panel	ASTM B-117	<48 hrs
Test Panel Coating Method		0.5 mil on grit blasted steel panel
Abrasion Resistance	ASTM D-4060	Fair
Coefficient of Friction	ASTM D-2714	.02 to .04
Operating Temperature Range		-365° to 750°F (-221° to 399°C)
Load Carrying Capacity	ASTM 2625, method B	<100,000 psi
Wear Life	ASTM 2625, Method A	>60 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	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 811 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

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

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