# **Technical Data**

# Everlube® 6111

# PTFE, Solid Film Lubricant



Surface Technologies Division 100 Cooper Circle | Peachtree City, GA 30269 T: 770.261.4800 | F: 770.261.4805 | 800-428-7802

# **Product Description**

Everlube 6111 is a thermally cured, PTFE/MoS<sub>2</sub> based solid film lubricant with a high molecular weight epoxy binder system. This coating is ideal for applications that require excellent corrosion resistance along with a very low coefficient of friction. Everlube 6111 also offers very good chip and wear resistance. For specification on Everlube 6111, please visit our specification guide at: http://www.everlubeproducts.com/products

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Features / Benefits				
Excellent corrosion resistance	Very good chip resistance			
Very good wear resistance	Ideal for lighter load carrying applications			
Markets	Typical Applications			
• Fasteners	Large fasteners			
<ul><li>Fabricated Metal Parts</li><li>Industrial Machinery</li></ul>	<ul><li>Springs, coils, and clamps</li><li>Mandrels, castings, and stampings</li></ul>			
Chemical Processing	<ul> <li>Mandrels, castings, and stampings</li> <li>Petro chemical hardware</li> </ul>			
Physical Properties				
Lubricating Solids	MoS <sub>2</sub> /PTFE			
Binder	High molecular weight epoxy			
Color and Appearance*	Dark gray finish (other colors may be available)			
Carrier	Solvent borne			
Solids (by weight)*	34% to 38%			
Density*	$9.1\pm0.5$ lb/gal (1092 $\pm$ 60 grams/liter)			
Flash Point	40°F (4.4°C)			
Volatile Organic Compound	685 grams/liter (5.71 lb/gal)			
Theoretical Coverage <sup>1</sup>	744 ft²/gal @ 0.5 mils (18.2 m²/liter @ 12.7 microns)			
Alternative or Repair Coatings	For touch-up applications, Perma-Slik® RMT works well with Everlube 6111.			
Processing Information				
Dry Film Thickness	0.2 to 0.7 mil (5 to 18 microns)			
Dilution / Cleanup Solvent	MEK			
Dilution Ration (for spray)	1:1 to 1:3 (product to solvent) by volume			
Cure Cycle	1 hr @ 375°F to 400°F			
Suggested Pretreatment	Grit blast and/or phosphate			
Suggested Application Method	Spray			
For additional information, please see Processing Bulleting #3000-A				

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Typical Functional Proper	ties			
	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	<b>)</b>	-100°F to 400°F (-73 to 204°C)		
Load Carrying Capacity	ASTM 2714	Up to 40,000 psi		
Wear Life	ASTM 2714	55,000 cycles avg.		
Pencil Hardness	ASTM D-3363	4H		
Chemical Resistance (ASTM D-2510, Method C)				

Isopropyl Alcohol or Ethyl Alcohol	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 (room temperature)	Pass	Jet Fuels (JP-4)	Pass
Hydraulic Fluids	Pass	Trichloroethylene	Pass
Anti-Icing Fluids	Pass	Standard test fluid, TT-S-735, Type II	Pass
Aviation gas, Mil-G-5572, Gd. 115/45	Pass	Hydraulic Fluid, Mil-H-5606	Pass
Aircraft Turbine Oil, Mil-L-7808	Pass	H-D Lube Oil, Mil-L-2104	Pass
1,1,1 Trichloroethane	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 6111 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.

Issue Date: 1/15/03, Latest Revision Date: 11/03/17

<sup>\*</sup> These tests are performed on each production lot

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