

Technical Data

Everlube® 6102G

PTFE, Solid Film Lubricant

**CURTISS -
WRIGHT**

Everlube® Products

Surface Technologies Division

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Product Description

Everlube 6102G is a thermally cured, PTFE/MoS₂ based solid film lubricant with a high molecular weight phenolic binder system. This coating enhances the torque/tension relationship in fasteners applications, which allows for a tighter clamp loads and less variability. Everlube 6102G is purchased by a wide variety of markets, ranging from Automotive to Medical.

Features / Benefits

- | | |
|---|--|
| <ul style="list-style-type: none">• Very good wear life• Good color and processing flexibility | <ul style="list-style-type: none">• Suitable for Medical ISO 10993 bio-compatibility testing• Very good corrosion and chemical resistance |
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Markets

- Automotive
- Medical
- Fabricated Metal Parts
- Fasteners

Typical Applications

- Small to medium fasteners
- Surgical instruments
- Mandrels, castings, and stampings
- Springs, coils, and clamps

Physical Properties

Lubricating Solids	PTFE, MoS ₂
Binder	High molecular weight phenolic
Color and Appearance*	Satin Black Finish
Carrier	Solvent based
Solids (by weight)*	32% to 36%
Density*	8.3 ± 0.5 lb/gal (995 ± 60 grams/liter)
Flash Point	16°F (-8.9°C)
Volatile Organic Compound	680 grams/liter (5.67 lb/gal)
Theoretical Coverage ¹	604 ft ² /gal @ 0.5 mils (14.7 m ² /liter @ 12.7 microns)
Alternative or Repair Coatings	A low VOC alternative coating for Everlube 6102G is our Everlube 9502.

Processing Information

Dry Film Thickness	0.3 to 0.8 mils (8 to 20 microns)
Dilution / Cleanup Solvent	MEK, 50/50 Ethanol/Toluene, or 600 Solvent
Dilution Ration (for spray)	1:2 (product to solvent by volume) adjust as needed
Cure Cycle	1 hr @ 300°F ± 25°F
Suggested Pretreatment	Grit blast and/or phosphate
Suggested Application Method	Dip Spin, Spray

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

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Typical Functional Properties

	<u>ASTM Test Method</u>	<u>Value</u>
Corrosion Resistance		
Test Panel	ASTM B117	600 hrs. @ 5% neutral salt spray
Test Panel Coating Method		0.8 mil on grit blasted steel panel
Abrasion Resistance	ASTM D4060	Good
Coefficient of Friction	ASTM D2714	.06 to .08
Operating Temperature Range		-100°F to 300°F (-73°C to 149°C)
Load Carrying Capacity	ASTM 2714	Up to 40,000 psi
Wear Life	ASTM 2714	>120,000 cycles
Pencil Hardness	ASTM D3363	5H
Film Adhesion	ASTM D2510	Pass
Thermal Stability	ASTM D2511	Pass

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	Aircraft Lube Oil, Mil-L-6082	Pass
Aircraft Turbine Oil, Mil-L-7808	Pass	H-D Lube Oil, Mil-L-2104	Pass
DC-550 Fluid ³	Pass	1,1,1-trichloroethane	Pass
Lubricating Oil, VV-L-800	Pass	Lubricating Oil, Weapons (Mil-L-14017)	Pass
Lubricating Oil, Aircraft Turbine, Mil-L-23699	Pass	Lubricating Oil, Semi-Fluid	Pass

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

Additional InformationShelf 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 6102-G is available in gallon, 5-gallon pail, 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 (12.7 microns).

Issue Date: 10/31/02, Latest Revision Date: 11/03/17