Technical Data

Everlube ® 620

MoS_2/Graphite Solid Film Lubricant

Everlube ® Products
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Everlube 620 is a molybdenum disulfide and graphite based solid film lubricant in a thermally cured organic binder system. Everlube 620 provides superior wear reduction, extremely high load-carrying capacity, a low coefficient of friction and prevents both galling and seizing. Everlube 620 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

- Ideal for higher load carrying applications
- Very good chemical resistance
- Excellent coefficient of friction, good wear life
- Suitable for Medical ISO 10993 bio-compatibility testing

Typical Applications

- Virtually all fasteners
- Surgical Instruments
- Dampers, tubes and tracks
- Threaded connectors and disconnects

Markets

- Aerospace/Defense
- Medical
- Mechanical Components
- Fasteners

Physical Properties

Lubricating Solid:	MoS_2, Graphite
Binder:	High Molecular Weight Phenolic
Color and Appearance:*	Gray/Black Matte Finish
Carrier:	Solvent Borne
Solids (by weight):*	35 to 39%
Density:*	9.2 ± 0.5 lb/gal (1102 ± 60 grams/liter)
Flash Point:	38°F (3°C)
Volatile Organic Compound:	695 grams/liter (5.8 lb/gal)
Theoretical Coverage:[1]	545 ft^2/gal @ 0.5 mils (13.3 m^2/liter @ 12.7 microns)

Alternative or Repair Coatings: A low VOC alternative coatings for Everlube 620 is our Everlube 9001. For touch-up applications, Lubri-Bond A works well with Everlube 620.

Processing Information[2]

Dry Film Thickness	0.2 to 0.7 mils (5 to 18 microns)
Dilution / Cleanup Solvent:[2]	600 Solvent or 50/50 ethyl alcohol and toluene
Dilution Ratio:	1:1 to 1:3 (Product to Solvent)
Cure Cycle:[2]	1 hr@300°F to 375°F
Suggested Pretreatment:	Grit Blast and/or Phosphate

Suggested Application Methods: Dip Spin / Spray

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

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Typical Functional Properties

	ASTM Test Method	Value
Corrosion Resistance		
Test Panel	ASTM B117	<100 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	0.04 to 0.06
Operating Temperature Range		-100° to 400°F (-73° to 204°C)
Load Carrying Capacity	ASTM 2625, Method B	<100,000 psi
Wear Life	ASTM 2625, Method A	120 minutes
Film Adhesion *	ASTM D2510, Method A	Pass
Aluminum Corrosion Test*	ASTM D2649	Pass 500 hours

Chemical Resistance (ASTM D-2510, Method C)

Isopropyl Alcohol or Ethyl Alcohol	P	Diethanolamine	P
Mineral Spirits or Paint Thinner	P	Hydrochloric Acid (10%)	P
Toluene	P	Sodium Hydroxide (10%)	P
Acetone	P	Distilled Water	P
Skydrol 500	P	Jet Fuels (JP-4)	P
Hydraulic Fluids	P	Trichloroethylene	P
Anti-Icing Fluids	P	Std Test Fluids, TT-S-735, Ty II[3]	P
Aviation Gasoline, MIL-G-5572, Grade 1[5/145]	P	Hydraulic Fluids, Petroleum, Mil-H-5606	P
Aircraft Piston Engin Oil, Mil-L-22851	P	Aircraft Turbine Engine Oil, Mil-L-23699[3]	P
Non-Petroleum Hydraulic Fluid, Mil-H-8446	P	Silicone Base Damping Fluids, W-D-1078	P

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

Shelf Life and Storage: One year from date of shipment, stored in a factory sealed container between the temperatures, 40° to 100°F. Coatings are thermally stable, but we do not recommend prolonged exposure outside of the specified temperature range listed above.

Packaging: Everlube 620 is available in Gallon, 5-Gallon Pail, 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 Test are performed on each production lot.
** Contact Everlube Products for any certification fee
[1] Based on 100% transfer efficiency at a dry film thickness of .0005 inch (25.4 microns).
[2] Contact Technical Services for additional options.

Issue Date: 08/19/02, Latest Revision Date: 7/1/13