# **Technical Data**

# Everlube® Product

# Everlube® 620A

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

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## **Product Description**

Everlube 620A is a thermally cured MoS2 based solid film lubricant which utilizes a high molecular weight phenolic binder system. This coating provides excellent chemical resistance, good abrasion and corrosion

1 .	Aluminum alloys, magnesium alloys and any base substrate			
Features / Benefits	DOVE 300 1.			
<ul> <li>Very good wear life and abrasion resistance</li> <li>Very good chemical resistance</li> </ul>	<ul><li>RoHS Compliant</li><li>Ideal for higher load carrying applications</li></ul>			
Markets	Typical Applications			
Aerospace/Defense     Industrial Machinery     Mechanical Components     Chemical Processing	<ul> <li>Threaded Connectors and disconnects</li> <li>Rollers, brackets, and disc plates</li> <li>Gears, splines and cams</li> <li>Spherical, sleeves bearings</li> </ul>			
Physical Properties	MoC			
Lubricating Solids: Binder:	$MoS_2$ High molecular weight phenolic			
Color and Appearance:*	Matte gray/black finish			
Carrier:	Solvent borne			
Solids (by weight):*	28% to 32%			
Density:*	$8.3 \pm 0.5$ lb/gal (995 ± 60 grams/liter)			
Flash Point:	24°F (-4°C)			
Volatile Organic Compound:	697 grams/liter (5.81 lb/gal)			
Theoretical Coverage: <sup>1</sup>	426 ft²/gal@ 0.5 mils (10.4 m²/liter @ 12.7 microns)			
Alternative or Repair Coatings:	N/A			
Processing Information				
Dry Film Thickness	0.3 to 0.7 mils (8 to 18 microns)			
Dilution/Cleanup Solvent:	MEK, or 50% Ethyl Alcohol and 50% Toluene (pre-blended)			
Dilution Ratio for Spray:	1:3 (product to solvent by volume) adjust as needed			
Cure Cycle:	1 hr. @ 275°F ± 15°F			
Suggested Pretreatment:	Grit blast and/or phosphate			
Suggested application Methods:	Dip spin, spray, brush			

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

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#### Everlube 620A Page 2

Typical Functional Properties				
	ASTM Test Metho	<u>d</u>	<u>Value</u>	
Corrosion Resistance				
Test Panel	ASTM B-117		>100 hrs. @ 5% neutral salt spray	
Test Panel Coating Method			0.5 mil on grit blasted steel	panel
Abrasion Resistance	ASTM D-4060		Good	
Coefficient of Friction	ASTM D-2714		.04 to.06	
Operating Temperature Range			-100°F to 300°F (-73°C to 1	49°C)
Load Carrying Capacity*	ASTM 2625, Method B		>250,000 psi	
Wear Life*	ASTM 2625, Method A		>60 minutes	
Chemical Resistance (ASTM D-25	10, Method C)			
Isopropyl Alcohol or Ethyl Alcohol	Pass	Diethanolam	nine	Pass
Mineral Spirits or Paint Thinner	Pass	Hydrochloric	: Acid (10%)	Pass
Toluene	Pass Sodium Hyd		roxide (10%)	Pass
Acetone	Pass	Distilled Water		Pass
Skydrol 500	N/R	Jet Fuels (JF	P-4)	Pass
Hydraulic Fluids	Pass	Trichloroethy	ylene	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 620A is available is 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.

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<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).