

Technical Data



Everlube® Products

Surface Technologies Division

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Lubri-Bond® 333

MoS₂/Graphite, Solid Film Lubricant

Product Description

Lubri-Bond 333 is an air drying, MoS₂/Graphite water based solid film lubricant which utilizes an air curing organic binder system. This coating offers a very low coefficient of friction, good wear life while preventing galling and seizing in a wide variety of applications. Lubri-Bond 333 is ideal for use where a thermally cured coating is not practical.

Features / Benefits

- Excellent coefficient of friction
- Prevents galling and seizing
- Very good wear life
- Ideal for field applications

Markets

- Industrial Machinery
- Fabricated Metal Parts
- Mechanical Components
- Chemical Processing

Typical Applications

- Shafts, splines, and gears
- Threaded connectors and disconnects
- Guides, slides and tracks
- Valve and pump components

Physical Properties

Lubricating Solids	MoS ₂ /Graphite
Binder	Organic
Color and Appearance*	Flat Gray Finish
Carrier	Water borne
Solids (by weight)*	25% to 29%
Density*	9.4 ± 0.5 lb/gal (1126 ± 60 grams/liter)
Flash Point	>200°F (93°C)
Volatile Organic Compound	505 grams/liter (4.21 lb/gal)
Theoretical Coverage ¹	375 ft ² /gal @ 0.5 mils (9.1 m ² /liter @ 12.7 microns)
Alternative or Repair Coatings	For touch-up applications, Perma-Slik RAC works well with Lubri-Bond 333

Processing Information

Dry Film Thickness	0.2 to 0.5 mil (5 to 13 microns)
Dilution / Cleanup Solvent	Acetone or Distilled Water
Dilution Ration	Ready to apply
Cure Cycle	24 hrs @ 77°F +/- 10°F or 2 hrs. @ 180°F
Suggested Pretreatment	Grit blast and/or phosphate
Suggested Application Method	Spray/dip spin

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

(Continued)

Typical Functional Properties

	<u>ASTM Test Method</u>	<u>Value</u>
Corrosion Resistance		
Test Panel	ASTM B117	<24 hrs @ 5% neutral salt spray
Test Panel Coating Method		0.5 mil on grit blasted steel panel
Abrasion Resistance	ASTM D4060	Fair
Coefficient of Friction	ASTM D2714	.02 to .04
Operating Temperature Range		100°F to 300°F (38°C to 149°C)
Load Carrying Capacity	ASTM D2625, Method B	<100,000 psi
Wear Life	ASTM D2625, 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	N/R	Sodium Hydroxide (10%)	N/R
Acetone	N/R	Distilled Water	Pass
Skydrol 500	N/R	Jet Fuels (JP-4)	Pass
Hydraulic fluids	Pass	Trichloroethylene	N/R
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:

Lubri-Bond 333 is available in gallon, 5-gallon pail, gallon, and 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: 12/10/02, Latest Revision Date: 2/16/12