

Technical Data



Everlube® Products

Surface Technologies Division

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Lubri-Bond® 320 HS

PTFE, Solid Film Lubricant

Product Description

Lubri-Bond 320 HS is an air dry, PTFE based solid film lubricant that utilizes an epoxy binder system. This coating provides good corrosion resistance, and performs best in lighter load carrying applications. Lubri-Bond 320 HS is a higher solids version of our standard Lubri-Bond 320 that allows improved bulk processing capabilities and exhibits improved anti-settling characteristics. Specifications for this product can be found at: <http://www.everlubeproducts.com/products>.

Features / Benefits

- Good chemical and corrosion resistance
- RoHS compliant
- Suitable for field applications
- Ideal for lighter load carrying applications

Markets

- Semiconductor
- Industrial machinery
- Fabricated metal parts
- Mechanical components

Typical Applications

- Pump and valve components
- Slides, guides, rails, brackets
- Elastomeric components
- Spring and coils

Physical Properties

Lubricating Solids	PTFE
Binder	Epoxy
Color and Appearance*	Translucent finish (other colors may be available)
Carrier	Solvent borne
Solids (by weight)*	17% to 21%
Density*	7.2 ± 0.5 lb/gal (864 ± 60 grams/liter)
Flash Point	24°F (-4°C)
Volatile Organic Compound	696 grams/liter (5.8 lb/gal)
Theoretical Coverage ¹	472 ft ² /gal @ 0.5 mils (11.6 m ² /liter @ 12.7 microns)

Processing Information

Dry Film Thickness	0.2 to 1 mil (5 to 25 microns)
Dilution / Cleanup Solvent	Methyl Ethyl Ketone (MEK)
Dilution Ratio (For spray)	1:1 to 2:1 (product:solvent by volume) Adjust as needed
Cure Cycle	12-24 hrs @ 77°F ± 10°F (25°C ± 7°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	>240 hrs @ 5% neutral salt spray
Test Panel Coating Method		1.0 mil on grit blasted steel panel
Abrasion Resistance	ASTM D4060	Good
Coefficient of Friction	ASTM D2714	.06 to .08
Operating Temperature Range		-100° to 250°F (-73 to 121°C)
Load Carrying Capacity	ASTM D2625, Method B	<20,000 psi
Wear Life	ASTM D2714	>50,000 cycles avg.

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)	N/R	Jet Fuels (JP-4)	Pass
Hydraulic fluids	Pass	Trichloroethylene	N/R
Anti-Icing fluids	Pass	Hydrocarbon test fluid (TT-S-735)	Pass
Cleaning compound (Mil-C-372)	Pass	Aviation gasoline (Mil-G-5572)	Pass
Hydraulic fluid (Mil-H-5606)	Pass	Turbine fuel (Mil-T-5624)	Pass
Lubricating oil (Mil-L-22851)	Pass	Lubricating Oil (Mil-L-14107)	Pass
Silicone damping fluid	Pass	Lubricating Oil (Mil-L-6082)	Pass
Lubricating oil (Mil-L-7808)	Pass	Lubricating Oil (Mil-L-46006)	Pass
			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 320 HS is available in gallon, 5-gallon pail, 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).

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