

Technical Data (Spec Qualified)

Lubri-Bond[®] 220

Air Dry, MoS₂ Solid Film Lubricant

**CURTISS -
WRIGHT**

Everlube[®] Products

Surface Technologies Division

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Product Description

Lubri-Bond 220 is an air drying, MoS₂ based solid film lubricant with an epoxy binder system. This coating provides good corrosion resistance and performs best in higher load carrying applications. It is ideal for applications that do not require a thermally cured coating. Lubri-Bond 220 is approved/qualified to many aerospace and industrial specification; these listings can be verified at <http://www.everlubeproducts.com/specification.php>. When requesting pricing or ordering of product, listing of the specification and revision is required to assure product certification compliance.

Features / Benefits

- Good corrosion resistance
- Fair chemical resistance
- Suitable for field applications
- Ideal for higher load carrying applications

Markets

- Aerospace/Defense
- Mechanical Components
- Industrial Machinery & Equipment
- Fabricated Metal Parts

Typical Applications

- Tooling, brackets and wear plates
- Guide and sliding rails
- Seals, clamps, and couplings
- Bearings, gears, splines and cams

Physical Properties

Lubricating Solids:	MoS ₂
Binder:	Epoxy
Color and Appearance:*	Gray/black matte finish
Carrier:	Solvent based
Solids (by weight):*	23.6 to 27.6%
Density:*	8.3 ± 0.5 lb/gal (995 ± 60 grams/liter)
Flash Point:	45°F (7°C)
Volatile Organic Compound:	737 grams/liter (6.15 lb/gal)
Theoretical Coverage: ¹	490 ft ² /gal @ 0.5 mils (7 m ² /liter @ 12.7 microns)
Alternative or Repair Coatings:	Thermally cured and water-based equivalents for Lubri-Bond 220 are Everlube 620C or Ecoalube 642 and Everlube 9002, respectively.

Processing Information²

Dry Film Thickness	0.3 to 0.6 mils (8 to 15 microns)
Dilution/Cleanup Solvent:	MEK
Dilution Ratio for Spray:	0 to 1:1 (Product to Solvent by volume) adjust as needed
Cure Cycle:	24 hr. @ 77°F +/- 10°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

	<u>ASTM Test Method</u>	<u>Value</u>
Corrosion Resistance		
Test Panel	ASTM B-117	>100 hrs. @ 5% neutral salt spray
Test Panel Coating Method		0.8 mil on grit blasted steel panel
Abrasion Resistance	ASTM D-4060	Fair
Coefficient of Friction	ASTM D-2714	0.04 to 0.06
Operating Temperature Range		-100°F to 250°F (-73°C to 121°C)
Load Carrying Capacity	ASTM 2625, Method B	>250,000 psi
Wear Life	ASTM 2625, Method A	>60 minutes
Film Adhesion*	ASTM D2510, Method A	Pass
Sulfurous acid salt spray*	Fed-Std-791, Method 5331	Pass 4 cycles
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	Pass	Jet Fuels (JP-4)	Pass
Hydraulic Fluids	Pass	Trichloroethylene	Pass
Anti-Icing Fluids	Pass	Hydrocarbon test fluid, TT-S-735	Pass
Cleaning Compound, MIL-C-372	Pass	Aviation Gasoline, MIL-G-5572	Pass
Petroleum Hydraulic Fluid, MIL-H-5606	Pass	Lubricating Oil, MIL-L-22851	Pass
Lubricating Oil, MIL-L-23699	Pass	Hydraulic Fluid, Non-petroleum	Pass
Silicone Damping Fluid, VV-D-1078	Pass	Gasoline, MIL-G-3056	Pass
Lubricating Oil, Gd. 1100, MIL-L-6082	Pass	Aircraft Turbine Oil, MIL-L-7808	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: Lubri-Bond® 220 is available in Gallon, 5-Gallon Pail, Quart, Aerosol Case

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 (12.5 microns).

Issue Date: 08/20/02, Latest Revision Date: 07/11/18