Technical Data

Lube-Lok® 5306

Mil Spec MoS₂ Solid Film Lubricant



Surface Technologies Division 100 Cooper Circle | Peachtree City, GA 30269 T: 770.261.4800 | F: 770.261.4805 | 800-428-7802

Product Description

Lube Lok® 5306 is a thermally cured MoS2 based solid film lubricant with a high molecular weight phenolic binder system. This coating provides very good wear life, chemical resistance, good abrasion resistance

	ons. Lube-Lok 5306 is approved/qualified to many aerospace and at http://www.everlubeproducts.com/specifications.php . When		
	the specification and revision is required to assure product certification		
Features / Benefits			
Very good wear life	Good abrasion resistance		
 Very good chemical resistance 	 Ideal for higher load carrying applications 		
Markets	Typical Applications		
 Aerospace/Defense 	 Bearings, gears, splines and cams 		
 Medical 	 Valve components 		
 Mechanical components 	 Hydraulic fittings 		
Industrial machinery & Equipment	Seals, clamps and couplings		
Physical Properties			
Lubricating Solids:	MoS_2		
Binder:	High molecular weight phenolic		
Color and Appearance:*	Matte gray finish		
Carrier:	Solvent borne		
Solids (by weight):*	40% to 44%		
Density:*	9.1 ± 0.5 lb/gal (1090 \pm 60 grams/liter)		
Flash Point:	16°F (-8.9°C)		
Volatile Organic Compound:	640 grams/liter (5.34 lb/gal)		
Theoretical Coverage: ¹	719 ft²/gal @ 0.5 mils (11 m²/liter @ 12.7 microns)		
Alternative or Repair Coatings:	A low VOC alternative coating for Lube Lok 5306 is our Everlube 9002. For touch-up applications, Perma-Slik G or Lubri-Bond 220 works well with Lube Lok 5306.		
Processing Information			
Dry Film Thickness	0.2 to 0.5 mils (5 to 13 microns)		
Dilution/Cleanup Solvent:	5000 solvent or MEK		
Dilution Ratio for Spray:	1:1 to 1:3 (product to solvent by volume) adjust as needed		
Cure Cycle:	1 hr. @ 302°F ± 27°F (150°C ± 15°C)		
Suggested Pretreatment:	Grit blast and/or phosphate		
Suggested application Methods:	Dip spin, spray, brush		

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

(Continued)

Typical Functional Properties					
	ASTM Test Metho	<u>d</u> <u>Value</u>			
Corrosion Resistance					
Test Panel		< 240 hr	s. @ 5% Neutral Salt Spray		
Test Panel Coating Method		0.5 mil o	n grit blasted steel panel		
Abrasion Resistance	ASTM D-4060	Good	Good		
Coefficient of Friction	ASTM D-2714	.04 to .08	.04 to .08		
Operating Temperature Range		-100°F to	o 300°F (-73°C to 149°C)		
Load Carrying Capacity	ASTM 2625, Meth	od B >250,00	>250,000 psi		
Wear Life	ASTM 2625, Meth	od A >250 mii	>250 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%) Pass			
Toluene	Pass	Sodium Hydroxide (10%) Pass			
Acetone	Pass	Distilled Water Pass			
Skydrol 500	Pass	Jet Fuels (JP-4) Pass			

Pass Trichloroethylene

Pass

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

Additional Information

Hydraulic Fluids

Anti-Icing Fluids

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

Pass

Packaging: Lube Lok® 5306 is available in 5-Gallon Pail, Gallon, 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.

Issue Date: 10/30/02, Latest Revision Date: 11/01/17

^{*} 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).