Technical Data (Spec Qualified)

Perma-Slik® G

Air Dry, 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

Perma-Slik G is an air drying; MoS₂ based solid film lubricant with an epoxy binder system. This coating provides a low coefficient of friction, good corrosion resistance, and performs best in higher load carrying applications. Perma-Slik G is approved/qualified to many aerospace and industrial specification; these listings can be verified at http://www.everlubeproducts.com/specifications.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 	 Suitable for field applications
 Good coefficient of friction 	 Ideal for higher load carrying applications
Markets	Typical Applications
Aerospace/Defense	Fittings and connectors
 Mechanical Components 	Guide, rails and tracks
 Industrial Machinery & Equipment 	 Bushings, shafts, splines and cams
Fabricated Metal Parts	 Seals, clamps and couplings

Physical Properties

Lubricating Solids MoS₂
Binder Epoxy

Color and Appearance* Gray/Dark Gray Matte finish

Carrier Solvent based Solids (by weight)* 24% to 26%

Density* 8.15 \pm 0.5 lb/gal (977 \pm 60 grams/liter)

Flash Point 24°F (-4°C)

Volatile Organic Compound 737 grams/liter (6.15 lb/gal)

Theoretical Coverage¹ 286 ft²/gal @ 0.5 mils (7 m²/liter @ 12.7 microns)

Alternative or Repair Coatings Solvent based thermally cured equivalents for Perma-Slik G are

Everlube 620C, Ecoalube 642, Lube Lok 5306, Everlube 733, and Lube Lok 2109. Water based thermally cured equivalents are Everlube 9002.

Processing Information

Dry Film Thickness 0.3 to 0.6 mil (8 to 15 microns)

Dilution / Cleanup Solvent MEK

Dilution Ration (for spray) 1:1 to 1:2 (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 Method Dip Spin/Spray

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

(Continued)

Typical Functional Properties	S			
	ASTM Test Method	<u>Value</u>		
Corrosion Resistance*				
Test Panel	ASTM B117	>100 hrs. @ 5% neutral salt spray		
Test Panel Coating Method		0.6 mil on grit blasted steel panel		
Abrasion Resistance	ASTM D4060	Fair		
Coefficient of Friction	ASTM D2714	0.04 to 0.06		
Operating Temperature Range		-100°F to 250°F (-73 to 121°C)		
Load Carrying Capacity*	ASTM 2625 Method B	>250,000 psi		
Wear Life*	ASTM 2625 Method A	>120 minutes		
Film Adhesion*	ASTM D2510 Method A	Pass		
Sulfurous acid salt spray*	Fed-STD-791, Method 5331	Pass 4 cycles		
Pencil Hardness*	ASTM D-3363	>3H (gouge)		
Chemical Resistance (ASTM D-2510, Method C)				

Pass	Diethanolamine	Pass
Pass	Hydrochloric Acid (10%)	Pass
Pass	Sodium Hydroxide (10%)	Pass
Pass	Distilled Water	Pass
Pass	Jet Fuels (JP-4)	Pass
Pass	Trichloroethylene	Pass
Pass	TT-S-735 Hydrocarbon test fluid ²	Pass
Pass	Mil-H-5606 Petroleum Hydraulic Fluid ²	Pass
Pass	MIL-L-23699 Lubricating Oil ²	Pass
Pass	MIL-L-3056 Gasoline ²	Pass
Pass	MIL-L-7808 Aircraft turbine oil ²	Pass
Pass		
	Pass Pass Pass Pass Pass Pass Pass Pass	Pass Hydrochloric Acid (10%) Pass Sodium Hydroxide (10%) Pass Distilled Water Pass Jet Fuels (JP-4) Pass Trichloroethylene Pass TT-S-735 Hydrocarbon test fluid² Pass Mil-H-5606 Petroleum Hydraulic Fluid² Pass MIL-L-23699 Lubricating Oil² Pass MIL-L-3056 Gasoline² Pass MIL-L-7808 Aircraft turbine oil²

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: Perma-Slik® G 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).
- ² Specific chemicals tested per the specification requirements.

Issue Date: 8/19/02, , Latest Revision Date: 6/26/13

