

Technical Data

Perma-Slik[®] RRM

Air Dry, MoS₂ Solid Film Lubricant

**CURTISS -
WRIGHT**

Everlube[®] Products

Surface Technologies Division

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Product Description	
Perma-Slik RRM is a MoS ₂ based solid film lubricant with an inorganic binder system. This coating was developed to lubricate components, which remain in place for long periods of time. Perma-Slik RRM prevents wear, galling, and seizing in a wide variety of environments. Generally, this coating will dry to the touch in less than 30 minutes and is fully cured in 6 hours. Perma-Slik RRM is used in many railroad related applications.	
Features / Benefits	
<ul style="list-style-type: none">• Excellent thermal stability• Very good wear resistance	<ul style="list-style-type: none">• Prevents galling, seizing, and fretting• Ideal for higher load carrying applications
Markets	Typical Applications
<ul style="list-style-type: none">• Mechanical components• Industrial machinery & equipment• Fabricated metal parts• Aerospace/defense	<ul style="list-style-type: none">• Railroad switches-manual/electric• Cutting tools, and threaded connections• Bearing guides and sleeves• Cold forming
Physical Properties	
Lubricating Solids:	MoS ₂
Binder:	Inorganic
Color and Appearance:*	Matte dark gray finish
Carrier:	Solvent borne
Solids (by weight):*	33% to 38%
Density:*	9.1 ± 0.5 lb/gal (1090 ± 60 grams/liter)
Flash Point:	15°F (-9°C)
Volatile Organic Compound:	710 grams/liter (5.92 lb/gal)
Theoretical Coverage: ¹	497 ft ² /gal @ 0.5 mils (12.1 m ² /liter @ 12.7 microns)
REACH Compliant:	Yes
RoHS Compliant:	Yes
Alternative or Repair Coatings:	N/A
Processing Information	
Dry Film Thickness	0.2 to 0.7 mils (5 to 18 microns)
Dilution/Cleanup Solvent:	Heptane or Toluene. Xylene or VM&P mineral spirits may be used as a retarder solvent.
Dilution Ratio:	1:1 to 2:1 (product to solvent)
Cure Cycle:	1 to 6 hours @ 77°F ± 10°F
Suggested Pretreatment:	Grit blast
Suggested Application Methods:	Dip spin, spray

For additional information, please see Processing Bulletin #3017

Typical Functional Properties:

	<u>ASTM Test Method</u>	<u>Value</u>
Corrosion Resistance		
Test Panel	ASTM B-117	<48 hrs @5% neutral salt spray
Test Panel Coating Method		0.7 mil on grit blasted steel panel
Abrasion Resistance	ASTM D-4060	Fair
Coefficient of Friction	ASTM D-2714	.04 to .06
Operating Temperature Range		-325°F to 750°F (-198°C to 399°C)
Load Carrying Capacity	ASTM 2714	>250,000 psi
Wear Life	ASTM 2625, Method A	>120 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	Pass	Sodium Hydroxide (10%)	N/R
Acetone	Pass	Distilled Water	Pass
Skydrol 500	Pass	Jet Fuels (JP-4)	Pass
Hydraulic Fluids	Pass	Trichloroethylene	Pass
Anti-Icing Fluids	Pass	1,1,1 Trichloroethane	Pass
Reagent Water	Pass	DC-550	Pass
Mil-L-2104	Pass	Mil-L-8446	Pass
Mil-A-8243	Pass		

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: Perma-Slik RRM is available in 5-gallon pails, gallons and quarts.

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.

* 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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