

## TECHNICAL DATA

PPSRWAC

### Perma-Slik® RWAC Solid Film Lubricant

#### Product Design

- Air dries to the touch in minutes; fully cured within 6 hours.
- Contains tungsten disulfide in a solvent base, inorganic resin binder.
- Does not contain graphite or molybdenum disulfide.
- Effective in extreme environments such as vacuum and elevated temperatures.
- Prevents galling, seizing, and fretting.
- High load carrying capabilities.
- Formulated for spray, dip or brush application.
- Available in one gallon and five gallon containers.

#### Suggested Uses

- Excellent for mechanical elements, bearings and threaded connections under vacuum or at temperatures to 850°F (in air) or 1200°F (in an inert environment).
- Can be used for both hot and cold forming, very effective in reducing oxide pick-up when applied to extrusion dies.

#### Typical Physical Properties

Operating Temperature Range	-300°F to > 850°F (in air) (-184°C TO 454°C)
Color	Gray/Black
Recommended Thickness	0.0002 to 0.0006 inches (5 to 15 microns)
Solids Content (by weight)	50 ± 2%
Consistency/Viscosity	Thixotropic liquid
Flash Point (Tag closed cup)	15°F (-9°C)
Density	10.3 ± 0.5 lbs/gallon (1235 ± 60 grams/liter)
Theoretical Coverage	465 sq.ft./gallon* @ 0.5 mils
Shelf Life	1 year from date of shipment in a factory sealed container at 40°F to 90°F (4°C to 32°C).
VOC Content	5.1 lbs/gallon (616 grams/liter)

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**Typical Mechanical Properties**

Wear Life (Falex pin/block) ASTM D-2625, method A	130 minutes
Load carrying capacity ASTM D-2625, method B	2000 lbf.
LFW-1 ASTM D-2714, no oil	
150 lb. load	220,000 cycles avg.
630 lb. load	114,000 cycles avg.
Taber Abrasion ASTM D-4060	100 mg/loss 1000 cycles
Fluid resistance ASTM D-2510 method C	
Skydrol 500A	Pass
Water	Pass
JP-4 jet fuel	Pass
1,1,1 trichloroethane	Pass
Reagent water	Pass
DC-550	Pass
MIL-L-2104	Pass
MIL-L-8446	Pass
MIL-L-8243	Pass
Vacuum out gassing test (3.0 x 10 <sup>-6</sup> Torr, on binder system)	
Total mass loss	0.69%
Collected volatile condensable material	0.01%
Water vapor recovered	0.02%

**Recommended Application Procedures:**

Application Methods	Brush, dip, dip/spin or spray
Dilution Ratio:	
Brush, dip, or dip/spin	No dilution to 1:1 (product:solvent)
Spray	2:1 to 1:1 (product:solvent)
Dilution and Clean-up Solvent	Toluene or heptane. Xylene or VM&P mineral spirits can be used as a retarder solvent to slow down the evaporation rate and improve flow and leveling.
Dry film thickness:	0.2 to 0.6 mils (5 to 15 microns)
Cure:	Dries to the touch in minutes at 75°F to 80°F (24°C to 26°C) fully cures in 1 to 6 hours depending on temperature and humidity.

NOTE: This product is a moisture cure coating. Oven curing will not accelerate curing. Avoid water contamination in the solvents as it will cause the binder to react (cure) thus reducing the performance of the system.

Refer to Technical Data Sheet 3000-A for complete application instructions.