# Technical Data Perma-Slik® RWAC Solid Film Lubricant



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#### **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 Color Recommended Thickness Solids Content (by weight) Consistency/Viscosity Flash Point (Tag closed cup) Density Theoretical Coverage

Shelf Life

**VOC Content** 

-300°F to > 850°F (in air) (-184°C TO 454°C) Gray/Black 0.0002 to 0.0006 inches (5 to 15 microns)  $50 \pm 2\%$  Thixotrophic liquid 15°F (-9°C)  $10.3 \pm 0.5$  lbs/gallon (1235  $\pm$  60 grams/liter) 465 sq.ft./gallon\* @ 0.5 mils 1 year from date of shipment in a factory sealed container at 40°F to 90°F (4°C to 32°C). 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 Pass** Reagent water DC-550 **Pass** MIL-L-2104 Pass **Pass** MIL-L-8446 Pass MIL-L-8243

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.

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