



# POXYLUBE® #800

DRY FILM LUBRICANT: HEAT CURE

SERIES E800

PTFE MODIFIED COATING



PORT BYRON, IL 61275 • 1-309-523-2121

1-800-747-1084 • FAX: 1-309-523-3912

[www.sandstromproducts.com](http://www.sandstromproducts.com)

## DESCRIPTION

Sandstrom Poxylube® #800 Dry Film Lubricant is a single component epoxy formulated with PTFE to provide excellent lubrication, fluid resistance and corrosion protection. This heat cured material prevents corrosion, galling, seizing and fretting.

Once Sandstrom Poxylube® #800 has been applied to a properly prepared surface and allowed to cure, it is virtually unaffected by atmospheric and fretting corrosion, solvents, acids, oils and degreasers. Poxylube® #800 can be applied to all metallic and nonmetallic surfaces by spray or dip application.

**POXYLUBE® #800 CONTAINS NO GRAPHITE.**

## LIMITATIONS

Do not use where there is potential for contact with food.

## NOTICE

**Before using this product, read all warnings, limitations and safety information printed on the product label, Safety Data Sheet (MSDS), and Technical Data Sheet.**

## OUTSTANDING FEATURES/BENEFITS

- Excellent corrosion protection
- Easy application
- Provides excellent lubrication
- Provides heavy duty service as an exterior protective coating for all metals including magnesium
- Offers resistance to chemical corrosion and solvents
- Exhibits good thermal stability
- Delivers abrasion and impact resistance
- Remains adhered when metals encounter denting
- Proficient on brass applications

## COMPOSITION AND PHYSICAL PROPERTIES

<b>Net Weight per gallon</b>	8.0 ± 0.4 lbs.	<b>Vehicle</b>	Epoxy
<b>Weight Solids</b>	24.0 - 32.0%	<b>Lubricating Pigment</b>	PTFE
<b>Volume Solids</b>	17.5 ± 2.0%	<b>Color</b>	Clear, Black, Tile Red and Green
<b>VOC</b>	5.74 - 5.85 lbs./gallon (Theoretical)	<b>Coverage Rate*</b>	575 sq. ft./gal @ 0.5 mil DFT
<b>Odor</b>	Strong Solvent	<b>Recommended Coats</b>	1
<b>Viscosity</b>	15 - 25 seconds, #2 EZ Zahn @ 77°F	<b>Dry Film Thickness</b>	0.5 – 1.0 mils
<b>Shelf Life</b>	1 year from date of shipment		
<b>Storage Conditions</b>	Store below 100°F		
<b>Freeze/Thaw Stability</b>	Stable		

\*Actual figures do not include spray loss. Also allow for surface irregularities and porosity, as well as material loss when mixing.

## PERFORMANCE AND FUNCTIONAL PROPERTIES

<b>Chemical/Fluid Resistance:</b>	
MIL-PRF-46147 Table I Fluids ASTM D2510 A, ASTM D2510 C	Pass
LOX-Compatible	Yes
<b>Corrosion Protection:</b>	
ASTM B117: Steel MIL-DTL-16232 Type Z Class 3	500 hrs. (at 0.5 mil)
<b>Crosscut Adhesion</b> ASTM D3359 Test Method A	5A
<b>Operating Temperature Range</b>	-320°F to +400°F

**IMPORTANT NOTICE TO BUYER / WARRANTY AND LIMITATIONS ON OUR LIABILITY**

We warrant our products to be free of manufacturing defects and that they meet our current published physical properties and specifications. All information and suggestions presented are rendered gratis and are accurate to the best of our knowledge. They are based on technical data we believe to be reliable and are intended for use by persons having skill and "know-how" at their own discretion and risk. Prior to use, customers are cautioned to determine the suitability of our products for any given application through their own testing. NO WARRANTY IS MADE, EXPRESS OR IMPLIED, REGARDING SUCH INFORMATION. THE DATA ON WHICH IT IS BASED OR THE RESULTS OBTAINED FROM ITS USE OR THAT OUR PRODUCT SHALL BE MERCHANTABLE OR FIT FOR ANY PARTICULAR PURPOSE. SUCH STATEMENTS ARE NOT INTENDED TO SUGGEST INFRINGEMENT OF ANY PATENT. Since conditions of use of our products are beyond our control, all suggestions and statements are made without guarantee, warranty or other responsibility, express or implied, on our part. We assume no responsibility for results obtained, or damages incurred, from their use beyond replacing material proved to be defective or refunding the purchase price of such material at our option. Acceptance of delivery of our product means you have accepted the terms of this warranty, whether or not purchase orders of other documents state terms that vary from this warning. No seller is authorized to make any representations or warranty or assume any other liability on our behalf with any sales of our products. SANDSTROM PRODUCTS COMPANY

**GENERAL**

For maximum service, the APPLICATION INSTRUCTIONS MUST BE FOLLOWED CLOSELY.

**COVERAGE**

One gallon of this material will theoretically cover 575 sq. ft. with a dry film thickness of 0.0005 inches. Coverage depends upon methods of application and other variables such as overspray and type of surface to be coated. Above coverage rates are based on 100% efficiency.

**SURFACE PREPARATION**

The following surface preparations are recommended for the individual metals listed to develop maximum adhesion, wear life, and corrosion protection. Please contact Sandstrom Products Company for substitute surface preparations if recommended steps cannot be followed.

**Application on steel.** Pre-clean surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Abrasive blast surface with 180-220 grit aluminum oxide (25-50 RMS optimum). Phosphate IAW MIL-DTL-16232 (weight should be 1100-1400 milligrams per sq. ft.), type Z, class 3.

**Application on stainless steel.** Pre-clean the steel surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surfaces to pass ASTM F22. Abrasive blast the surfaces with 180-220 grit aluminum oxide (25-50 RMS optimum). Passivate the surfaces with ASTM A967, types nitric 1, nitric 2 or nitric 3, as applicable.

**Application on aluminum.** Pre-clean surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Anodize (hot water or nickel acetate seal only) or hard coat and seal with hot deionized water (>180°F for 30 minutes).

**Application on titanium.** Degrease the surfaces to be coated with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surfaces to pass ASTM F22. Abrasive blast the surface with 180-220 grit aluminum oxide (25-50 RMS optimum) and alkaline anodize.

**Application on copper alloys.** Pre-clean surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Pretreat using one of the following methods (in order of preference):

- a) Black oxide treat (according to MIL-F-495)
- b) Bright dip, or grit blast (25-50 RMS optimum)

**IMPORTANT! DO NOT TOUCH CLEAN SURFACE WITH FINGERS - OIL FROM THE HANDS WILL INTERFERE WITH PROPER COATING ADHESION.** Whenever possible, treat both contact surfaces (i.e., the shaft and the bearing).

**STIRRING**

**IMPORTANT!** THIS LUBRICANT CONTAINS HEAVY PIGMENTS WHICH SETTLE RAPIDLY. THEREFORE, IT SHOULD BE STIRRED THOROUGHLY BEFORE USE AND CONTINUOUSLY DURING APPLICATION.

**THINNING**

**For conventional spraying** - Reduce sparingly with MEK.  
**For dipping** - Not necessary, but can be reduced sparingly with PMA.

**APPLICATION**

Poxylube® #800 should be sprayed or dipped to the desired film thickness (usually 0.0003 to 0.0007 inches).

**BAKING**

Allow parts to flash off at least 30 minutes before baking. Poxylube® #800 can be cured according to the following schedule:

- 60 minutes @ 300°F or
- 25 minutes @ 350°F or
- 20 minutes @ 375°F or
- 15 minutes @ 400°F.

It is important to **keep container of Poxylube® #800 closed when not in use** to keep loss of solvents at minimum and avoid change in volume solids.

**IMPORTANT!** The time begins when **the part** has reached the baking temperature, NOT when it is placed in the oven.

**CLEANUP**

Use the same solvents for cleaning tools as are recommended for thinning or use MEK.

**REMOVAL**

In the event it is necessary to remove Poxylube® #800, physical removal is best (such as grit blasting, sanding or grinding).

**WARNINGS:** Constant stirring is imperative for best results.

**DANGER! USE WITH ADEQUATE VENTILATION.**

\*\*\*Strict compliance to the instructions given in Surface Preparation, Stirring and Baking is very essential for obtaining optimum results.\*\*\*