POXYLUBE® #800

DRY FILM LUBRICANT: HEAT CURE

SERIES E800

PTFE MODIFIED COATING

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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

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

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

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:

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.