POXYLUBE® #887

DRY FILM LUBRICANT: HEAT CURE

SERIES E887

PTFE MODIFIED COATING

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DESCRIPTION

Poxylube® #887 Dry Film Lubricant is a single component epoxy formulated with PTFE to provide lubrication, fluid resistance and corrosion protection. This heat cured material prevents corrosion, galling, seizing and fretting.

Once Poxylube® #887 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® #887 can be applied to all metallic and nonmetallic surfaces by spray or dip application.

POXYLUBE® #887 CONTAINS NO GRAPHITE.

OUTSTANDING FEATURES/BENEFITS

- Hardness, slip, and corrosion protection
- Offers resistance to chemical corrosion (including Skydrol), solvents, abrasion, and impact

NOTICE

Before using this product, read all warnings, limitations and safety information printed on the product label, Safety Data Sheet and Technical Data Sheet. The properties listed on this sheet are not intended for use as a specification. Please contact our Technical Service Team.

Refer to our website for answers to common questions:
https://www.sandstromproducts.com/resources/FAQs/

OUTSTANDING FEATURES/BENEFITS (CONTINUED)

- Exhibits good thermal stability
- Solvent-borne with accelerated flash-off for quick handling
- Visually appealing, smooth finish with a distinctive satin texture in handling
- May be recoated after flash off period or after roughening with a Scotch-Brite™ Scouring Pad after full heat cure

COMPOSITION AND PHYSICAL PROPERTIES

Net Weight per gallon ^ *ASTM D1475*	8.25 ± 0.25 lbs.	**Vehicle**	Epoxy
Weight Solids^ *ASTM D2369*	40.0 - 45.0%	**Lubricating Pigment**	PTFE
Volume Solids	30.0 – 35.0% (Theoretical)	**Color**	Black, Silver Custom Colors upon Request
VOC	4.5 - 5.0 lbs./gallon (Theoretical)	**Color Stability**	Not for exterior use
Odor	Strong Solvent	**Finish**	Satin
pH	N/A	**Gloss^** *ASTM D523*	<20 gloss units at 60°
Viscosity^ *ASTM D562*	60 - 70 KUs @ 77°F	**Coverage Rate***	1068 sq. ft./gallon @ 0.5 mil DFT
Shelf Life	12 Months from Date of Shipment	**Recommended Coats**	1
Storage Conditions	< 100°F	**Dry Film Thickness** *ASTM D7091*	0.0005 in. – 0.001 in.
Freeze/Thaw Stability	Yes		
Flash Point	< -5°C / 23°F		

*Actual figures do not include spray loss. Also allow for surface irregularities and porosity, as well as material loss when mixing.
^ Property tested with each production batch.

PERFORMANCE AND FUNCTIONAL PROPERTIES

CS-17 Taber Abrasion *ASTM D4060*	97 mg/1000 cycles	**Crosscut Adhesion:** *ASTM D3359 Test Method A*	*Aluminum*	5A
			CRS	5A
Chemical/Fluid Resistance: *ASTM D2510A, ASTM D2510C*			*Stainless Steel*	5A
MIL-PRF-46147 Table I	Pass	**Hardness** *ASTM D3363*	*CRS*	HB
MIL-L-23398 Table III	Pass		*Phosphated Steel*	2H
Skydrol	Pass	**Operating Temperature Range**	-320°F to +400°F	
*MEK Double Rubs^*	100+	**Coefficient of Friction** *ISO 16047*	Black: 0.07 Other colors may vary	
Corrosion Protection:				
ASTM B117: Iron Phosphate	168 hours			

ASTM B117: Steel *MIL-DTL-16232 Type Z Class 3*	>1000 hours		
^ Property tested with each production batch.			

GENERAL
For maximum service, the APPLICATION INSTRUCTIONS MUST BE FOLLOWED CLOSELY. This product is flammable and the safety precautions followed when using any flammable material must be observed.

FILM THICKNESS & ENGINEERING TOLERANCE
When thinned as directed, Poxylube® #887 will yield a film thickness of about 0.0005 inches per applied coat. Usually engineering tolerances will permit necessary minimum film buildup of 0.0005 to 0.001 inches without interference. Whenever possible, the proper tolerances should be designed into the part.

COVERAGE
One gallon of this material will theoretically cover 1068 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 the surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Abrasive blast the surface with 180-220 grit aluminum oxide (25-50 RMS optimum). Phosphate IAW MIL-DTL-16232 (weight should be 11-22 g/m^2), type M, class 3 or type Z, class 3.

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

Application on aluminum and aluminum alloys. Pre-clean the 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). Sulfuric acid anodize IAW MIL-A-8625 and seal surface with hot deionized water (>180°F for 30 minutes).

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

Application on copper and copper alloys. Pre-clean the surface with aliphatic naphtha or any other EPA compliant cleaner that sufficiently cleans surface to pass ASTM F22. Abrasive blast the surface with 180-220 grit aluminum oxide (25-50 RMS optimum). Form a black oxide finish on the surface.

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! STIR THOROUGHLY BEFORE USE AND INTERMITTENTLY DURING APPLICATION.

THINNING
For conventional spraying - For a fast dry, reduce up to 2 parts coating to 1 part Sandstrom D152-C01 Thinner Blend. For ultra-fast dry, reduce up to 2 parts coating to 1 part Sandstrom D169 Thinner Blend.

For Dip Spin – Reduce 1 part coating to 1 part Sandstrom D169 Thinner Blend.

APPLICATION
Poxylube® #887 should be sprayed to the desired film thickness (usually 0.0005 to 0.001 inches).

BAKING
Allow parts to flash off at least 30 minutes before baking or force dry for 15 minutes @ 150°F. Poxylube® #887 should then be cured for 20 minutes @ 300°F.

It is important to **keep container of Poxylube® #887 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® #887, physical removal is best (such as grit blasting, sanding or grinding).

WARNINGS: Frequent 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.