

**POXYLUBE #420**  
**AIR DRYING SOLID FILM LUBRICANT**  
**SERIES V420**



**DESCRIPTION**

Sandstrom **POXYLUBE #420** is a lacquer-like coating containing molybdenum disulfide and graphite. This Air Drying material prevents corrosion, galling, seizing and fretting. It is a low-friction coating which exhibits long wear life when operated at -100°F to 500°F under loads exceeding 100,000 psi.

**TYPICAL USES**

**Sandstrom POXYLUBE #420 is an excellent in-plant or field solution to the problem of lubricating parts:**

- Where operating pressures exceed the load-bearing capacities of ordinary oils and greases
- Where application of a baked-on lubricant is not possible
- Which may be operated in corrosive atmospheres
- That may be stored for long periods
- Which are seldom lubricated once they leave the factory and where permanent lubrication is desired
- Where "clean operation" is desired - **POXYLUBE #420** will not collect dirt and debris as do grease and oils
- Where parts may be subjected to frequent disassembly
- Where a protective coating and sacrificial break-in lubricant is needed
- Where fretting and galling is a problem (such as splines, universal joints and keyed bearings)
- Where easy release is desired (such as threads of all kinds)
- No viscosity change at varying temperatures

**COMPOSITION AND PHYSICAL PROPERTIES**

<b>Net Weight per Gallon</b> (uncut)	7.72 lbs per gallon (±.2 lb)	<b>Theoretical Coverage</b> (uncut)	432 sq ft/gallon @ 0.5 mil DFL
<b>Solids Content</b>	18.26% ± 2% by Weight	<b>Dry Film Thickness</b>	.0002" TO .0007" DFL
<b>Viscosity</b>	40-55 SEC @ 77°F (#1 Zahn cup)	<b>Load Carrying Capacity</b>	2750 lbs (Falex E.P.)
<b>VOC</b> (Theoretical)	6.31 lbs per gallon	<b>Corrosion Protection</b>	100 HRS (5% salt fog @ .0005" SFL over zinc phosphated steel)
<b>Operating Temperature Range</b>	-100°F to +500°F	<b>Chemical/Fluid Resistance</b>	Excellent
<b>Vehicle Type</b>	Vinyl	<b>Application Method</b>	Conventional spraying or Dipping
<b>Lubricative Pigment</b>	Graphite and Molybdenum Disulfide	<b>Thinner/Clean-up</b>	Use as received Not necessary to thin. Use Isopropanol or MEK for cleaning.
<b>Color</b>	Flat Dark Gray	<b>Odor</b>	Strong Solvent
<b>Shelf Life</b>	1 year from date of shipment		
<b>Storage Conditions</b>	40°F to 90°F		

## NOTICE

Before using this product, read all warnings and safety information printed on the label, the Material Safety Data Sheet, and the Technical Info-Guide

## GENERAL

For maximum service, the APPLICATION INSTRUCTIONS MUST BE FOLLOWED CLOSELY. The lubricant is flammable and the safety precautions usually followed when using flammable materials must be observed.

## 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.

**STEEL** - Degrease using naphtha meeting the requirements of FED spec TT-N-95, grit blast (25-50 rms optimum), remove grit blast debris from surface, zinc phosphatize according to MIL-DTL-16232 Type M, Class 3 or Type Z Class 2.

**STAINLESS STEEL** - Degrease using naphtha meeting the requirements of FED spec TT-N-95, grit blast (25-50 rms optimum), remove grit blast debris from surface, passivate.

**ALUMINUM** - Degrease using naphtha meeting the requirements of FED spec TT-N-95, anodize according to MIL-A-8625 Type I, II or III Class 1.

**TITANIUM** - Solvent wash (nonchlorinated) and alkaline anodize (Tiodize Type I or II).

**COPPER ALLOYS** - Degrease using naphtha meeting the requirements of FED spec TT-N-95, then pretreat using one of the following methods (in order of preference).

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

**IMPORTANT! AVOID TOUCHING THE SURFACES TO BE COATED--OIL FROM HANDS WILL INTERFERE WITH PROPER COATING. 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

Not necessary to thin.

## APPLICATION

Apply **POXYLUBE #420** as received (uncut) by conventional spray or dip.

## DRYING

Tack free in 3-5 minutes (50% relative humidity at 70°F with adequate ventilation). Air drying 24 hours will yield maximum hardness. Allow surface to dry at least 30 minutes to 1 hour before doing light assembly work.

This material may be force cured by using moving hot air or infrared bulbs. After a flash time of 30 minutes, parts can be baked at 250°F for 30 minutes.

## CLEAN-UP

Use Isopropanol or MEK for clean-up.

**\*\*Strict compliance to the instructions given in Surface Preparation and Stirring is essential to obtain optimum results.**

**WARNINGS: FLAMMABLE. Keep away from sparks and open flame. Use with adequate ventilation. Avoid prolonged breathing of vapors. If swallowed, DO NOT INDUCE VOMITING. Contains Isopropanol, Methyl Ethyl Ketone and 1,3-Dioxolane. Call physician immediately.**

### 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 is accurate to the best of our knowledge. They are based on technical data which 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 or 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. © 2/1/98 SANDSTROM PRODUCTS COMPANY 3/07/01