

#103 SOLID FILM LUBRICANT
HEAT CURING, READY-TO-APPLY
SERIES E106



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DESCRIPTION

Sandstrom #103 Solid Film Lubricant contains molybdenum disulfide, PTFE, and corrosion inhibiting pigments. This material provides unique wear properties as well as exceptional chemical/fluid resistance and corrosion protection. **#103** can be applied over all metals by spraying.

SANDSTROM #103 CONTAINS NO GRAPHITE

RECOMMENDED USAGE

Sandstrom #103 is an excellent solution to the problem of lubricating parts:

- 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 operating pressures exceed the load-bearing capacities of ordinary oils and greases
- Where "clean operation" is desired - **#103** 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

Net Weight (uncut)	8.20 ± 0.2 lbs/gal	Color	Flat Dark Gray
Nonvolatiles	35.5 ± 2.0% by weight (Theoretical) 21 ± 1% by volume (Theoretical)	Shelf Life	1 year from date of shipment
Viscosity	38-42 sec. @ 77°F (#1 Zahn cup)	Storage Conditions	40°F to 100°F
Flash Point	30°F +/- 2°F Setaflash	Endurance/Wear Life	60 to 100 minutes (ASTM D2625 Procedure A)
Operating Temperature Range	- 320°F to +500°F	Load Carrying Capacity	1000 lbs. (ASTM D2625 Procedure B)
Vehicle Type	Epoxy	Corrosion Protection	1000+ hours salt spray over heavy zinc phosphate
Lubricative Pigment	Molybdenum Disulfide and PTFE		

NOTICE

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

GENERAL

For optimum performance from this product, SURFACE PREPARATION and APPLICATION INSTRUCTIONS MUST BE CLOSELY FOLLOWED.

COVERAGE

One gallon of this material will cover 335 sq. ft. with a dry film thickness of .0005 inches. Coverage depends upon methods of application and other variables such as over-spray 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.

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, phosphatize according to MIL-DTL-16232 Type M, Class 3 or Type Z Class 3

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 spec MIL-F-495C)
- 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. 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

E106-G75 is ready to use.

APPLICATION

Sandstrom #103 (E106-G75) may be applied by conventional spray. Flash off coated parts **at least** 30 minutes before baking.

*A variation of this formula is available for dip application.

Please contact Sandstrom Products Company for more information.

BAKING

Bake 30 minutes at 350°F or 15 minutes at 400°F. Start timing after parts reach temperature. NOTE: If blistering occurs, solvent is being entrapped and flash-off time and/or solvents may need to be adjusted. **IT IS IMPERATIVE TO USE A PROPERLY VENTED OVEN (DIRECT VENT TO THE OUTSIDE).**

CLEANUP

Use Methyl Ethyl Ketone for cleaning tools.

IMPORTANT: Keep container closed when not in use to keep loss of solvents at minimum and avoid change in volume solids.

**Strict compliance to the instructions given in Surface Treatment, Stirring, and Baking is essential to obtain optimum results.

WARNING: Constant stirring is imperative for best results. Caution: Flammable. Keep away from sparks and open flame. Use with adequate ventilation. Avoid prolonged breathing of vapors. If swallowed--DO NOT INDUCE VOMITING. Contains Toluene and Phenolic and Epoxy Resins. 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 IT'S 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. ©2/98 SANDSTROM PRODUCTS COMPANY 6/12/03