

# #329 SOLID FILM LUBRICANT

HEAT CURING - FOR USE IN EXTREME ENVIROMENTS  
 LEAD FREE - VOC COMPLIANT- Conforms to MIL-PRF-81329  
 SERIES L270



## DESCRIPTION

#329 is a single component, waterborne, inorganic heat-curing coating which may be applied to a wide variety of metals.

## TYPICAL USES

- Formulated for extreme environments where temperature, nuclear radiation and vacuum preclude the use of conventional lubricants and organic solid film lubricants.
- Use in liquid oxygen systems, space vehicles, bearing assemblies and other equipment.
- Provides lubrication
- Offers resistance to friction, wear, galling and seizing
- Exhibits excellent thermal stability
- VOC compliant

## 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.

## APPLICATION INSTRUCTIONS

1. Mandatory that all surfaces be degreased to achieve adhesion. Avoid touching the cleaned surfaces with fingers.
2. Steel surfaces - Grit blast to a surface profile of 50 - 60 RMS. Remove grit blast. Call Sandstrom Technical Representative for information on preparing other metals.
3. Apply #329 by conventional spraying, dipping or brushing. Thin as needed with deionized water.
4. For Mil Spec work follow all instructions in MIL-PRF-81329

**IMPORTANT! THIS LUBRICANT CONTAINS HEAVY PIGMENTS THAT REQUIRE THOROUGH MIXING BEFORE AND DURING USE.**

5. Flash off parts 30 minutes @70°F, 50% relative humidity, before placing in oven.
6. **CURE:** 2 hours @ 180°F, then 2 hours @ 300°F.
- NOTE:** Start timing when part has reached required temperature.
7. Clean up with water, immediately.
8. In the event it is necessary to remove #329, physical removal is best, ie: grit blasting, sanding or grinding.

## COMPOSITION AND PHYSICAL PROPERTIES

<b>VOC (Theoretical)</b>	0.0 lbs/gallon	<b>Thermal Stability</b>	Withstands thermal shock from 750°F to Liquid Oxygen immersion with no signs of blistering, cracking, peeling, chipping, loss of adhesion or high temperature aging. ASTM D2511 LOX
<b>Net Weight per Gallon</b>	13.9 +/- 0.5 lbs	<b>Wear Life</b>	80 Minutes (Falex @1000 lbs gauge load) ASTM D2625A
<b>Solids Content</b>	53% ± 2% (By Weight)	<b>Load Carrying</b>	2500 LBS (Falex E.P.) ASTM D2625B
<b>Viscosity</b>	90 - 110 KU @ 77°F	<b>Recommended DFT</b>	.001 - .0014"
<b>Flash Point</b>	Non Flammable	<b>Odor</b>	Odorless
<b>Operating Temperature Range</b>	-185°C to +400°C	<b>Storage Conditions</b>	Store at temperatures 40°F - 100°F
<b>Color</b>	Matte Gray	<b>Shelf Life</b>	1 year from date of manufacture
<b>Vehicle Type</b>	Sodium Silicate	<b>Theoretical Coverage</b>	Coverage rate @ .001" DFT = 325 sq ft/gallon
<b>Pigmentation</b>	Molybdenum Disulfide/Graphite		
<b>Chemical/Fluid Resistance</b>	Insoluble in solvents, conventional fuel, grease and will withstand LOX cleaning - LOX compatible		

NOTE: Do not use with oils or grease unless field use indicates need

### 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. © 2/1/98 SANDSTROM PRODUCTS COMPANY 6/13/03