



HEAT RESISTANT COATING
OEM COATING: HEAT CURE
SERIES L277
FOR HIGH TEMPERATURE APPLICATIONS

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DESCRIPTION

Heat Resistant Coating (L277) is a single component inorganic waterborne system. This heat cured coating may be applied to a wide variety of metal substrates to offer resistance to high heat, friction, wear, galling and seizing.

L277 is formulated for extreme environments where temperature, nuclear radiation and vacuum preclude the use of organic materials.

OUTSTANDING FEATURES/BENEFITS

- Offers resistance to extreme heat exposures up to 400°C
- Exhibits excellent thermal stability
- Withstands thermal shock for LOX compatibility
- ZERO VOC

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.

TYPICAL USES

- Metals exposed to extreme heat cycling temperatures
- Automotive, agricultural, and aerospace high temperature applications
- Liquid oxygen systems, bearing assemblies, head gaskets and exhaust gaskets

COMPOSITION AND PHYSICAL PROPERTIES			
Net Weight per gallon	11.3 ± 0.5 lbs.	Vehicle	Soluble Silicate
Weight Solids	40.0% ± 5.0%	Lubricating Pigment	Molybdenum Disulfide and Graphite
VOC	0 (Theoretical)	Color	Matte Gray
Odor	Odorless	Cleanup	See CLEANUP
Viscosity	600 - 1200 cps, #2 @ 200 rpm, 77°F	Thinner	See THINNING
Shelf Life	1 year from date of shipment	Force Cure	See BAKING
Storage Conditions	40°F – 100°F	Coverage Rate*	360 sq. ft./gallon @ 0.5 mils
Freeze/Thaw Stability	KEEP FROM FREEZING	Dry Film Thickness	0.5 – 1.2 mils
Flash Point	Nonflammable		

*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:	Insoluble in solvents, conventional fuel & grease
<i>Lox Compatible</i>	Yes
Operating Temperature Range	-185°C to +400°C
Thermal Stability <i>ASTM D2511 LOX</i>	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

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 are accurate to the best of our knowledge. They are based on technical data 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 of 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. SANDSTROM PRODUCTS COMPANY

SURFACE PREPARATION

Surface needs to be degreased to achieve optimum adhesion.

Application on Steel. Abrasive blast to a surface profile consistent with SSPC-SP/5 NACE #1, White Metal Blast Cleaning. Remove abrasive blast media with clean compressed air.

Call Sandstrom Technical Representative for information on preparing other metals.

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 COATING CONTAINS HEAVY PIGMENTS WHICH SETTLE RAPIDLY. THEREFORE, IT SHOULD BE STIRRED THOROUGHLY BEFORE USE AND CONTINUOUSLY DURING APPLICATION.

THINNING

No thinning necessary as this is a Ready-To-Apply material.

APPLICATION

Apply L277 by conventional spraying.

BAKING

To avoid blistering and bubbles in the finished coat, use the following schedule or equivalent:

Flash off in spray booth for 5 - 8 minutes, with fans running to provide good air movement across the coated parts. Place the coated parts in a 140°F oven. Immediately ramp up the oven temperature to 300°F for 15 minutes. After the 15 minutes, shut off the oven heater, but leave the fans running, and allow cooling for 15 - 20 minutes before removal of the parts from the Class A oven.

CLEANUP

Clean up with water immediately.

REMOVAL

In the event it is necessary to remove L277, physical removal is best (i.e.: grit blasting, sanding or grinding).

WARNINGS: Constant stirring is imperative for best results.

DANGER! USE WITH ADEQUATE VENTILATION.