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
Lox Compatible	Yes
Operating Temperature Range	-185°C to +400°C
Thermal Stability *ASTM D2511 LOX*	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

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.