



SILVER LINING®

CONDUCTIVE COATING: AIR DRY

SERIES A905

ACRYLIC LATEX, EMI/RFI SHIELD



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DESCRIPTION

Silver Lining® is an all-acrylic latex conductive coating designed for use as an EMI/RFI shield coating for computers, electronic cabinets and structures and also as a reflective satellite dish coating.

OUTSTANDING FEATURES/BENEFITS

- Nontoxic and Safer than nickel or copper coating alternatives
- Emits low odor and cleans up easily with water
- Offers excellent crosscut adhesion on concrete and almost every commercial plastic used in electronic enclosures
- Provides excellent conductivity
- Acts as an excellent EMI/RFI shield to substrates
- Offers application versatility: May be air dried or force cured
- Has minimal dish-to-dish reflective loss
- Reduces application time. The formula's high volume solids results in greater film build. When sprayed, the correct film thickness is usually achieved with one coat.

TYPICAL USES

- EMI/RFI shield coating for electronics industry
- Reflective coating for satellite dishes

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.

LIMITATIONS

- Some surface tarnishing may occur over a period of years. However, Lab tests indicate performance properties are unaffected.
- Applying at temperatures below 60°F, or relative humidity above 75%, will result in increased air dry time. (See Curing.)
- Silver particles may rise to the surface during shipment. Push gently into the liquid below and mix mildly before using.
- Direct exposure to sulfides or other sulfur compounds may result in reduced conductivity. A protective topcoat, such as Sandstrom Poxylube® 300 or Sancryl 520, is recommended for longevity and maximum exterior performance on satellite dishes and other exposed installations.

COMPOSITION AND PHYSICAL PROPERTIES

Net Weight per gallon	7.5 – 8.0 lbs./gallon	Vehicle	Acrylic Latex
Weight Solids	55.0 – 58.0% (as supplied)	Color	Light Tan
Volume Solids	60.0 ± 2.0% (as supplied)	Color Stability	Not for exterior exposure
VOC - water	< 1.0 lbs./gallon (120 g/L)	Finish	Flat Gloss
Odor	Mild Ammonia	Gloss	gloss units at 60°
pH	9.0 ± 0.3	Cleanup	Water
Viscosity <i>ASTM D562</i>	70 – 80 KUs @ 77°F	Thinner	Use as supplied
Shelf Life	24 Months from Date of Manufacture in an unopened container	Coverage Rate*	480 sq. ft./gallon @ 2.0 mils dry
Storage Conditions	40°F to 90°F	Recommended Coats	1
Freeze/Thaw Stability	Stable 1 cycle	Dry Film Thickness	2.0 - 3.0 mils
Flash Point	Above 200°F		

*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

Temperature Resistance	<i>Steady:</i> 200°F <i>Peak:</i> 300°F	Reflective Loss	0.01 dB at 18.0 GHz
Resistivity	<1.0 Ω / sq. @ 2.0 mils		

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 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. SANDSTROM PRODUCTS COMPANY

COVERAGE

One gallon of this material will cover 480 sq. ft. with a dry film thickness of 0.002 inches. Coverage depends upon methods of application and other variables such as overspray and type of surface to be coated. Above coverage rates are based on 100% efficiency.

SURFACE PREPARATION

Wipe with appropriate solvent that will not adversely affect the substrate.

STIRRING

Silver particles may rise to the surface during shipment. Push gently into the liquid below and mix mildly before using. Mix mildly every 5 - 10 minutes during application.

THINNING

For Spraying: Reduce sparingly with deionized water, spray 30 – 40 psi, 12 inches from surface of substrate. Apply 3.7 – 4.0 wet mils.

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).

APPLICATION

HVLP spray guns are recommended for best results. In all cases, avoid dry spraying Silver Lining®.

Application by HVLP. Binks Mach 1 spray gun (or equal) is recommended. Use 97AP air cap with 97 / 1.7 mm fluid nozzle. Maintain a wet edge. Apply 3.3 to 3.5 mils. Mildly mix the material every 5 – 10 minutes during application.

Application by conventional air. To avoid dry spray: Reduce sparingly with deionized, RO, or distilled water. Spray at 30 – 40 psi, maintain spray gun distance at 12 inches from the substrate being sprayed. Apply 3.7 to 4.0 wet mils. Maintain a wet edge but avoid sags. Mix during use when thinned. Very small areas and touch ups may be brush applied.

CURING

Ambient Cure: Air dry @ 77°F ± 5°F and ≤70% relative humidity.

Dry to Touch 20 minutes
 Full Cure 24 hours

Force Cure: After a flash time of 30 minutes, product can be force cured according to the following schedule:
 20 minutes @ 140°F.

IMPORTANT! The time starts when **the part** reaches temperature, not when placed in a Class A oven.

CLEANUP

Use water to clean up equipment before product dries.

WARNINGS: Intermittent stirring is necessary for best results.

DANGER! USE WITH ADEQUATE VENTILATION.

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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