Technical Data

Evershield® EC-S-704

Silver Conductive Coating

CURTISS-WRIGHT
Everlube® Products
Surface Technologies Division
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Product Description

Evershield EC-S-704 is a one component, silver filled acrylic coating specially formulated to provide excellent electrostatic discharge (RFI) and good shielding attenuation properties over the range of 30-1,000 MHz (EMI). The coating provides a low surface resistance, and adheres to a wide range of substrates, such as plastic, metal, and particle board. Specifications for this product can be found at: http://www.everlubeproducts.com/products.

Features / Benefits

- Very low surface resistance
- Adheres to a wide range of substrates
- Air drying
- Excellent EMI/RFI properties

Markets

- Electronics
- Mechanical components
- Government

Typical Applications

- Main frames
- Computers
- Phones, headsets, etc.
- Electronic connectors

Physical Properties

Binder:	Acrylic
Color and Appearance:*	Sivler metallic
Carrier:	Solvent
Solids (by weight):*	54% to 58%
Density:*	13.4 ± 0.5 lb/gal (1607 ± 60 grams/liter)
Flash Point:	23°F (-5°C)
Volatile Organic Compound:	708 grams/liter (5.9 lb/gal)
Theoretical Coverage:[1]	287 ft^2/gal @ 1.0 mils (7.0 m^2/liter @ 25.4 microns)
Alternative or Repair Coatings:	N/A
Operating Temperature Range:	0°F to 140°F (-18°C to 60°C)
Pencil Hardness:	H
Surface Conductivity:	< 0.1 ohm/sq. @ 2 mils dry film thickness
Shielding Effectiveness:	60-80 dB @ 2 mils thickness over the range of 30-1000MHz

Processing Information

Dry Film Thickness	1 to 3 mils (25 to 76 microns)
Dilution/Cleanup Solvent:	MEK, Toluene, or by substrate type (for plastics)
Dilution Ratio (for spray):	1:1 to 1:2 Product: solvent (by volume)
Cure Cycle:	12-24 hr. @ 77°F ± 10°F
Suggested Pretreatment:	Clean, dry surface
Suggested Application Methods:	Spray

Application Procedure:

1. *SURFACE PREPARATION.* Parts must be clean, dry and free of foreign matter. Steel and light alloy parts must be degreased.
2. *MIX* the coating thoroughly by stirring or shaking. Make sure all the solids are dispersed off the bottom of container.
3. *DILUTE* the coating using toluene. For plastic parts, dilute the coating with the appropriate solvent (or blend) to ensure proper adhesion, and to reduce the chance of stress cracking the substrate. A ratio of 1:1 (product: solvent by volume) is usually sufficient for spray.

4. *APPLY* Evershield EC-S-704 to a dry film thickness of 1-3 mils, or whatever the print calls for. (For best results, a dry film thickness of 2 mils is recommended.
5. *ALLOW* coating to dry at room temperature for 12-24 hours to achieve full properties.

Additional Information

Shelf Life and Storage:
One year from date of shipment, stored in a factory sealed container between the temperatures, 40°F to 100°F. Coatings are thermally stable, but we do not recommend prolonged exposure outside of the specified temperature range listed above

Packaging: Evershield EC-S-704 is available in 5-gallon pails, gallons, and quarts

Warranty:
No representation or warranty is expressed or implied and all warranties including warranties of marketability and fitness for use are expressly disclaimed. Nothing herein shall be construed as permission or recommendation to practice a patented invention without a license.

* These tests are performed on each production lot
[1] Based on 100% transfer efficiency at a dry film thickness of 0.0010 inch (25.4 microns).

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