

Technical Data

Evershield[®] EC-N-501L

Nickel Conductive Coating

Everlube[®] Products

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Product Description	
Evershield EC-N-501L is a one component, nickel 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 was specifically designed for polycarbonate substrates. Specifications for this product can be found at: http://www.everlubeproducts.com/products .	
Features / Benefits	
<ul style="list-style-type: none">• Low surface resistance• Designed for polycarbonate substrates	<ul style="list-style-type: none">• Air drying• Excellent EMI/RFI properties
Markets	Typical Applications
<ul style="list-style-type: none">• Electronics• Mechanical components• Government	<ul style="list-style-type: none">• Main frames• Computers• Phones, headsets, etc.• Electronic connectors
Physical Properties	
Binder:	Acrylic
Color and Appearance:*	Dark gray metallic
Carrier:	Solvent
Solids (by weight):*	48% to 52%
Density:*	11.6 ± 0.5 lb/gal (1391 ± 60 grams/liter)
Flash Point:	-4°F (-20°C)
Volatile Organic Compound:	696 grams/liter (5.8 lb/gal)
Theoretical Coverage: ¹	266 ft ² /gal @ 1.0 mils (6.53 m ² /liter @ 25.4 microns)
Operating Temperature Range:	0°F to 140°F (-18°C to 60°C)
Pencil Hardness:	H
Surface Conductivity:	< 1 ohm/sq. @ 2 mils dry film thickness
Shielding Effectiveness:	40-60 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:	1:1 to 1:2 Product: solvent (by volume) Adjust as needed.
Cure Cycle:	12-24 hr. @ 77°F ± 10°F
Suggested Pretreatment:	Clean, dry surface
Suggested Application Methods:	Spray
Application Procedure:	
<ol style="list-style-type: none">1. SURFACE PREPARATION. Parts must be clean, dry and free of foreign matter. Steel and light alloy parts must be degreased.2. MIX the lubricant 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-N-501L 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-N-501L 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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