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TECHNICAL DATA SHEET

SERIES 599-B5085 NICKEL CONDUCTIVE COATING

A sprayable metallic nickel conductive coating system, developed for use as an RFI and EMI shield for plastic electronic equipment housings. 599-B5085 can be used on acrylic, ABS and structural foams, e.g. Valox, etc., as well as solvent sensitive substrates, such as polycarbonate and polystyrene.

<u>SYSTEM:</u>	One-component, solvent base, air dry
<u>COLOR:</u>	Dark Grey
<u>PIGMENT:</u>	Nickel
<u>SOLIDS:</u>	47 % ± 1% by weight
<u>DENSITY:</u>	11.4 ± 0.5 lbs./gallon (1.37 ± 0.075 kg/liter)
<u>V.O.C.:</u>	6.0 lbs./gallon (728 grams/liter)
<u>DILUENT:</u>	B5092 Thinner
<u>RECOMMENDED DILUTION RATIO:</u>	1 part 599-B5085 Nickel to 1/1.5 part B5092 Thinner by volume
<u>ADHESION:</u> (ASTM 3359)	Excellent to most plastic substrates
<u>PENCIL HARDNESS:</u>	> 7H

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ATTENUATION: 60 - 65 db @ 30 MHz to 75 db @ 1 Ghz @ 2 mils dry
(ASTM) ES7-83)

SURFACE RESISTIVITY: < 0.50 ohms/square @ 1 mil (25 microns) DFT
< 0.20 ohms/square @ 2 mils (50 microns) DFT
These readings can be achieved under proper conditions:
(1) properly mixed paint; (2) film is 100% dry

MAXIMUM SERVICE TEMPERATURE: 300°F (149°C)

COVERAGE: 237 sq. ft./gallon/mil @ 100% transfer efficiency
(5.81m²/liter/25 microns)

APPLICATION METHOD: HVLP or standard air gun with fluid recirculation system is recommended. A pressure pot may be used provided that (1) it has a large diameter, paddle-type agitator to keep nickel in suspension and (2) a short translucent MEK-resistant fluid line of 3/8" (9.525mm) ID or smaller is used (such as Binks Synflex) to prevent settling in the line.

DRYING TIME: 30 minutes flash off at room temperature; then 30 minutes @ 140°F (60°C) at 2 mils (50 microns). Longer if thicker film; shorter if thinner film, to achieve desired resistivity.

HUMIDITY RESISTANCE: No change in resistivity or attenuation when tested in accordance with MIL-STD-202 Method 106 - 40 cycles; MIL-STD-810 Method 507 Procedure 5 - 480 hours cycling. Meets UL Specification 746-C.

STORAGE LIFE: Recommended storage in unopened containers is 12 months from date of shipment. Older material should have all Q.C. requirements rechecked before using.

NOTE: The solvent system of this product is designed for fast drying and early measuring of conductivity. In hot, humid weather, the fast drying may result in sporadic blushing. Blushing is a whitening of the surface of the coating caused by condensation of water in a hot, humid environment. The addition of 2 - 3% (3 - 4 oz. per gallon) of Butyl Cellosolve (Ethylene-Glycol-Mono-Butyl-Ether) will eliminate blushing.

