

SERIES 599-Y2000

Copper Conductive Coating

Features

SERIES 599-Y2000 A sprayable metallic coating system using a specially formulated non-oxidizing copper as the conductive agent. Developed for use as an RFI and EMI shield for plastic electronic equipment housings. 599-Y2000 can be used on acrylic, ABS and structural foams, e.g. Valox, etc. as well as solvent sensitive substrates polycarbonate such as and polystyrene. For Noryl use 599-Y2000T (Y1371).

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 ounces per gallon) of Butyl Cellosolve(Ethylene-Glycol-Mono-Butyl-Ether) will eliminate blushing.



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Product Description

SYSTEM: One component, air dry.

SOLIDS: $29\% \pm 2\%$ by weight.

DENSITY: 8.5 \pm .2 lbs. per gallon (1.02 \pm 0.03 kg per liter)

Viscosity Cup - Mfr. Paul N. Gardner)

ADHESION: Excellent to most plastic substrates.

ATTENUATION: More than 75 dB from 1 MHz to 1 Ghz.

THINNER: Check viscosity after thorough mixing. Adjust to 19

seconds (#2 EZViscosity Cup) with MEK, if

necessary.

APPLICATION HVLP or standard air gun with fluid recirculation wethou:

WETHOD: system is recommended. A pressure pot may

system is recommended. A pressure pot may be used provided that: (1) it has a large diameter, paddle-type agitator to keep copper in suspension and (2) a short translucent MEK-resistant fluid line of 1/8" (3.15 mm) 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 @ 160°F. (71°C.) at 2.0 mils (50 microns). Longer if thicker film, shorter if thinner film, to

achieve desired resistivity.

HUMIDITY

No change in resistivity or attenuation when tested

RESISTANCE: 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

The technical data presented in this bulletin is based upon information believed by PPG to be currently accurate. However, no guarantees of accuracy, comprehensiveness, or performance are given or implied. Continuous improvements in coatings technology may cause future technical data to vary from what is in this bulletin. Contact your PPG representative for the most up-to-date information.



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SURFACE

 $<\!0.05$ ohms/sq. @ 1 mil (25 microns) DFT. $<\!0.025 \pm 0.005$ ohms/sq. @ 2 mils (50 microns) . These readings can be achieved under proper conditions: (1) properly mixed paint; (2) film is 100% dry. **RESISTIVITY:**

190.4 ft². per gallon/ 1 mil (4.7m²/liter per 25 microns) @ 100% transfer efficiency (computed on volume solids) THEORETICAL **COVERAGE:**

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.

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