SERIES 599-B5085 is 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.

**Features**

**SYSTEM:** One-component, solvent base, air dry

**COLOR:** Dark Gray

**PIGMENT:** Nickel

**SOLIDS:** 47% +/- 1% by weight

**DENSITY:** 11.4 +/- 0.5 lbs/gallon (1.37 +/- 0.075 kg/liter)

**V.O.C.:** 6.0 lbs./gallon (728 grams/liter)

**DILUTENT:** B5092 Thinner

**RECOMMENDED DILUTION RATIO:** 1 part 599-B5085 Nickel to 1/1.5 part B5092 thinner by volume

**ADHESION:** Excellent to most plastic substrates. (ASTM 3359)

**PENCIL HARDNESS:** >7H

**ATTENUATION:** 60-65 db @ 30 MHz to 75 db @ 1Ghz @ 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

**MAX SERVICE TEMPERATURE:** 300˚F (149˚C)

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

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.
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 Blinks 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 in 12 months from date of shipment. Older material should have all QC 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 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.