

110-16

ELECTRICALLY CONDUCTIVE INK, COATING, AND ADHESIVE

DESCRIPTION: 110-16 is an electrically conductive ink, coating and adhesive which is particularly useful for electroless plating. This system is designed to maintain stable viscosity during all application methods and has a low odor. The product features excellent adhesion to Kapton, Mylar, glass and a variety of other substrates. Unlike conventional conductive materials, this product is very resistant to abrasion, scratching and thermal aging. Some applications for 110-16 include, but are not limited to, electroless plating, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, membrane switches, conductive ink for polymer thick film circuitry, and coatings for tantalum capacitors. 110-16 is suitable for application by dipping and syringe dispensing.

TYPICAL PROPERTIES:

Viscosity (cps)	5,000
Filler	Silver
Percent Silver	> 68
Settling Rate (mL/hr.)	0.027
Volume Resistance (ohm-cm, MAX)	0.0001
Solderable	After plating
Hydrolytic Stability	Excellent
Useful Temperature Range (°C)	-55 to +250
Thermal Stability (°C)	Good to +325

SUGGESTED HANDLING & BONDING: 110-16 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of 113-12 and/or 102-03. Prior to using, be certain to resuspend silver. Apply adhesive to surface to be bonded by hand or automatic method. A [B-stage step](#) is recommended for larger bond areas. Assemble and attach with slight pressure to ensure good mating of surfaces and formation of file.

SUGGESTED CURING: Best properties, for most applications, result when cured for 1 hour at 175°C with a post cure of 1 hour at 200°C. Good properties are obtained on a variety of substrates by curing at temperatures ranging from 50°C to 175°C. End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf life: 3 months at 25°C; or 6 months at 5°C; or 12 months at -20°C.

SAFETY & HANDLING: Use with adequate ventilation. Keep away from sparks and open flames. Avoid prolonged contact with skin and breathing of vapors. Wash with soap and water to remove from skin.

All technical information is based on data obtained by CMI personnel and is believed to be reliable. No warranty is either expressed or implied with respect to suitability in a particular application or possible infringements on patents.

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