



Creative Materials, Inc. 12 Willow Road Ayer, MA 01432

Thermal Stability (°C)

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110-16i

ELECTRICALLY CONDUCTIVE INK, COATING, AND ADHESIVE

<u>DESCRIPTION</u>: 110-16i 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 110-16i 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. 110-16i is suitable for application by dipping and syringe dispensing.

TYPICAL PROPERTIES:

4,750 Viscosity (cps) 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

SUGGESTED HANDLING & BONDING: 110-16i 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 filet.

Good to +325

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.