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123-18

1 MEG-OHM / SQUARE INK & COATING

DESCRIPTION: 123-18 is a carbon-based, electrically conductive ink, coating and adhesive suitable for application by stamping, screen printing, dipping and syringe dispensing. This product has excellent thermal stability and features excellent adhesion to Kapton®, Mylar®, glass and a variety of other surfaces. Unlike conventional conductive materials, this product is very resistant to flexing and creasing. Some applications for 123-18 include, but are not limited to, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, membrane switches, electrical attachments and static elimination. 123-18 can be blended with CMI's 112-48 (20 Ω /square), 112-15 (0.010 Ω /square), or 112-47 (25,000 Ω /square) in any ratio to obtain in-between electrical conductivity.

TYPICAL CURED PROPERTIES:

Consistency	Smooth Paste
Filler	Carbon
Crease Resistance	Excellent
Volume Resistivity (Ω -cm)	>2525
Sheet Resistivity (Ω /sq)	>1,000,000
Solderable	No
Hydrolytic Stability	Excellent
Useful Temperature Range ($^{\circ}$ C)	-55 to +200
Thermal Stability ($^{\circ}$ C)	Good to 325

SUGGESTED HANDLING & CURING: 123-18 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI Thinner#112-19. Best properties, for most applications, result when cured for several minutes at 170 $^{\circ}$ C to 180 $^{\circ}$ C. Good properties are obtained on a variety of substrates by dry and curing at temperatures ranging from 50 $^{\circ}$ C to 150 $^{\circ}$ C. End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf Life: 6 months at 21 $^{\circ}$ 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.