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112-46 50 OHM/SQUARE INK & COATING

DESCRIPTION: 112-46 is a carbon-based, electrically conductive ink and coating suitable for application by stamping, screen printing, dipping and syringe dispensing. This product has better thermal stability than 111-25 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 112-46 include, but are not limited to, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, membrane switches, electrical attachments and static elimination. 112-46 can be blended with CMI's 112-47 (25,000 ohm/square) and 101-59 (0.015 ohm/square) in any ratio to obtain in-between electrical conductivity.

TYPICAL PROPERTIES:

Viscosity	Approx. 140,000 cps
Filler	Carbon
Crease Resistance	Excellent
Volume Resistivity (Ω -cm)	0.126
Sheet Resistivity (Ω /sq)	50
Solderable	No
Hydrolytic Stability	Excellent
Useful Temperature Range ($^{\circ}$ C)	-55 to +180
Thermal Stability ($^{\circ}$ C)	Good to +200

SUGGESTED HANDLING & CURING: 112-46 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI 112-19. Excellent properties can be had when cured for 5 minutes at 125 $^{\circ}$ C. Great properties are also obtained on a variety of substrates by curing at temperatures ranging from 50 $^{\circ}$ C to 175 $^{\circ}$ C. End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf life: 2 months at 25 $^{\circ}$ C; or 6 months at 5 $^{\circ}$ C; or 12 months at -20 $^{\circ}$ 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.

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 results or possible infringements on patents.

REVISION DATE: 08/20/21 REVISION: C