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114-04

SPRAYABLE ELECTRICALLY CONDUCTIVE INK

DESCRIPTION: 114-04 is a sprayable, electrically conductive ink, and coating. This 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 and scratching. Some applications for 114-04 include, but are not limited to, EMI/RFI shielding of polyimide flexible circuits, shielding electronic packages, and anode coatings for tantalum capacitors. 114-04 can be further cross-linked with B-187 curing agent for applications requiring resistance to solvents and high humidity. 114-04 is a sprayable version of 105-43.

TYPICAL CURED PROPERTIES:

Consistency	Liquid
Filler	Silver
Percent Silver (cured)	85
Crease Resistance	Excellent
Volume Resistance (Ω -cm)	0.00005
Sheet Resistivity (Ω /sq/mil)	0.019
Solderable	No
Solvent Resistance	Excellent
Hydrolytic Stability	Excellent
Useful Temperature Range ($^{\circ}$ C)	-55 to 200
Thermal Stability ($^{\circ}$ C)	Good to 325

SUGGESTED HANDLING AND CURING: 114-04 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of Thinner 113-07. Prior to using, be certain to resuspend silver. Best properties, for most applications, result when cured for 30 minutes at 150 $^{\circ}$ C. Good properties are obtained on a variety of substrates by curing at temperatures ranging from 25 $^{\circ}$ C to 155 $^{\circ}$ C. Note: Add 0.5phr B-187 catalyst when using low temperature cures. The use of B-187 is suggested to impart a high degree of chemical resistance to the conductive lines. End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf life: 4 months at 25 $^{\circ}$ C; or 6 months at 5 $^{\circ}$ C; or 12 months at -10 $^{\circ}$ C.

SAFETY AND 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: 10/20/94 REVISION: A