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117-42

WATERBORNE MEDICAL GRADE CONDUCTIVE INK & COATING

DESCRIPTION: 117-42 is a waterborne, silver/ silver chloride, based electrically conductive ink and coating suitable for application by flexographic and rotogravure printing methods. This product features 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 117-42 include, but are not limited to, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, membrane switches, electrical attachments, medical electrodes and static elimination. 117-42 is a more conductive version of 117-40 for use in facilities where V.O.C's are a concern.

TYPICAL CURED PROPERTIES:

Consistency	Thin Liquid
Filler	Silver/ Silver Chloride
Crease Resistance	Excellent
Volume Resistivity (Ω -cm)	0.0002
Sheet Resistivity, max. (Ω /sq/mil.)	0.08
Solderable	No
Hydrolytic Stability	Excellent
Useful Temperature Range ($^{\circ}$ C)	-55 to +140
Thermal Stability ($^{\circ}$ C)	Good to 175

SUGGESTED HANDLING & CURING: 117-42 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of distilled water. Good properties, for most applications, result when cured for several minutes at room temperature. Best properties are obtained on a variety of substrates by dry and curing at temperatures ranging from 50 $^{\circ}$ C to 100 $^{\circ}$ 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. DO NOT ALLOW TO FREEZE.

SAFETY & HANDLING: 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: 2/5/96 REVISION: A