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## **114-31 THERMOFORMABLE ELECTRICALLY CONDUCTIVE INK**

**DESCRIPTION:** 114-31 is a thermoformable, polyester-based, electrically conductive ink, coating and adhesive suitable for application by stamping, screen printing, dipping and syringe dispensing. This product features excellent adhesion to Kapton, Mylar, glass and a variety of other surfaces. 114-31 is formulated to provide exceptional thermoforming characteristics. Unlike conventional conductive materials, this product is very resistant to flexing and creasing. Some applications for 114-31 include, but are not limited to, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, membrane switches, electrical attachments for surface mounted devices, and anode coatings for tantalum capacitors.

### **TYPICAL CURED PROPERTIES:**

Viscosity (cps)	18,000-20,000
Filler	Silver
Crease Resistance	Excellent
Volume Resistivity ( $\Omega$ -cm)	0.00012
Sheet Resistivity ( $\Omega$ /sq/mil)	0.05
Solderable	No
Hydrolytic Stability	Excellent
Useful Temperature Range ( $^{\circ}$ C)	-55 to +120
Thermal Stability ( $^{\circ}$ C)	Good to 140

**SUGGESTED HANDLING & CURING:** 114-31 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI Thinner #203 and/or butyl cellosolve acetate. Prior to using, be certain to re-suspend silver. Best properties, for most applications, result when cured for several minutes at 100 $^{\circ}$ C. 114-31 can be cured 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 25 $^{\circ}$ C; or 9 months at 5 $^{\circ}$ C; or 12 months at -10 $^{\circ}$ 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.

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