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**129-14(HR)**

**SOLVENT RESISTANT ELECTRICALLY CONDUCTIVE FAST-CURING EPOXY INK**

**DESCRIPTION:** 129-14(HR) is a one component, solvent-resistant, electrically conductive ink suitable for screen-printing, syringe dispensing, and jet dispensing circuits with finer line widths and spaces than typical conductive materials. This product features excellent adhesion to ITO coated surfaces, polyimide, polyester, glass, polycarbonate and other substrates. 129-14(HR) is very resistant to methyl ethyl ketone and other aggressive solvents and is also very resistant to scratching and creasing. This product is unique compared to traditional conductive inks in that it reaches 100% cure in very short times. Some applications for 129-14(HR) include, but are not limited to, touch screen bus bars, solar cell grid lines, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, and membrane switches. This product is designed for use in crossovers with CMI product 116-20, a UV curable dielectric or 118-08, a thermal cure dielectric. 129-14(HR) is a more resistive version of 129-14(LR).

**TYPICAL CURED PROPERTIES:**

Viscosity (cps, 10/s, 25°C)	~40,000
Filler	Silver
Percent Silver (cured)	> 85
Specific Gravity (g/cc)	~3.7
Crease Resistance	Excellent
Sheet Resistivity (ohm/sq./mil)	0.18 – 0.56
Solderable	After plating
Hydrolytic Stability	Excellent
Useful Temperature Range (°C)	-55 to +200
Thermal Stability (°C)	Good to +280

**SUGGESTED HANDLING AND CURING INSTRUCTIONS:** Material is ready to use as received. Remove product from freezer and allow material to warm to room temperature before opening container. Good results are obtained when product is cured at one of the following schedules, but end user is advised to experimentally determine temperature and time best suited for individual applications.

<u>Temp. (°C)</u>	<u>Time</u>
125	30 min.
150	15 min.
175	5 min.

**STORAGE:** Shelf life: up to 2 weeks at 25°C, or 6 months at -10°C, or 12 months at -40°C in unopened containers.

**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 suitability in particular application or possible infringements on patents.*

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