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## 121-30

### **CARBON / SILVER FILLED CONDUCTIVE INK**

**DESCRIPTION:** 121-30 is a carbon / silver filled, electrically conductive ink and coating for application by screen-printing, dipping and syringe dispensing. The product features excellent adhesion to Kapton, Mylar, glass and a variety of other substrates, including transparent conductive oxide coatings. Unlike conventional conductive materials, this product is very resistant to abrasion, scratching, flexing and creasing. Some applications for 121-30 include, but are not limited to, EMI/RFI shielding of polyimide flexible circuits, polymer thick film circuitry, solar cell and touch screen bus bar applications and back electrodes on electroluminescent devices.

#### **TYPICAL PROPERTIES:**

Viscosity (cps)	35,000 – 40,000
Filler	Carbon / Silver
Crease Resistance	Excellent
Volume Resistance, max. ( $\Omega$ -cm)	0.0004
Sheet Resistivity ( $\Omega$ /square/mil)	0.15
Hydrolytic Stability	Excellent
Useful Temperature Range ( $^{\circ}$ C)	-55 to 200

**SUGGESTED HANDLING & CURING:** 121-30 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI thinner #120-08 Prior to use, be certain to mix well to re-suspend fillers. **Best properties, for most applications, result when cured for 30 minutes at 90°C.** Excellent properties are also obtained on a variety of substrates by curing at temperatures ranging from 50°C to 175°C. End user is advised to experimentally determine temperature and time best suited for individual applications.

**STORAGE:** Shelf life: 2 months at 25°C; or 3 months at 5°C; or 6 months at -10°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 suitability in a particular application or possible infringements on patents.

REVISION DATE: 5/3/10 REVISION: B