



Creative Materials, Inc.  
12 Willow Road  
Ayer, MA 01432

T 978.391.4700  
F 978.391.4705

## 120-24

### ELECTRICALLY CONDUCTIVE CARBON FILLED EPOXY INK

**DESCRIPTION:** 120-24 is a carbon filled, screen-printable, electrically conductive, epoxy-based ink and coating suitable for application by screen- printing, dipping and syringe dispensing. This product features excellent 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 120-24 include, but are not limited to, printed potentiometers, printed resistors, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, membrane switches and anode coatings for tantalum capacitors. 118-41 is a 0.01  $\Omega$ /sq/mil silver version of this product.

#### **TYPICAL PROPERTIES:**

Viscosity (cps)	27,500
Filler	Carbon
Sheet Resistivity, max. ( $\Omega$ /sq/mil)	50*
Volume Resistivity, max. ( $\Omega$ -cm)	0.13
Hydrolytic Stability	Excellent
Useful Temperature Range ( $^{\circ}$ C)	-55 $^{\circ}$ to +200 $^{\circ}$
Thermal Stability ( $^{\circ}$ C)	Good to +280 $^{\circ}$

\* Cured 10 minutes at 175 $^{\circ}$  C in a convection oven

**SUGGESTED HANDLING & CURING:** 120-24 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI thinner 102-03. Prior to using, be certain to re-suspend filler. **Best** properties, for most applications, result when cured for 10 minutes at 175 $^{\circ}$ C. **Good** properties are obtained on a variety of substrates by dry and curing at temperatures ranging from 50 $^{\circ}$ C to 200 $^{\circ}$ C. End user is advised to experimentally determine temperature and time best suited for individual applications.

**STORAGE:** Shelf life: 3 months at 25 $^{\circ}$ 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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