

Creative Materials, Inc. 12 Willow Road Ayer, MA 01432 ISO 9001 CERTIFIED

T 978.391.4700 F 978.391.4705

## 121-07

## CARBON FILLED CONDUCTIVE INK

**<u>DESCRIPTION</u>**: 121-07 is a carbon filled, electrically conductive ink/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. Unlike conventional conductive materials, this product is very resistant to abrasion, scratching, flexing and creasing. Some applications for 121-07 include, but are not limited to, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, membrane switches and back electrodes on electroluminescent devices.

## **TYPICAL PROPERTIES:**

Viscosity (cps) 15000 - 20000

Filler Carbon
Crease Resistance Excellent

Volume Resistance, max.  $(\Omega$ -cm) 0.1 Sheet Resistivity  $(\Omega/\text{square/mil})$  50

Hydrolytic Stability (°C) Excellent
Useful Temperature Range (°C) -55 to 200

SUGGESTED HANDLING & CURING: 121-07 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI thinner #112-18. Prior to use, be certain to mix well to resuspend fillers. Best properties, for most applications, result when cured for 15 minutes at 150°C or 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.