



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

T 978.391.4700
F 978.391.4705

121-38

SILVER / CARBON FILLED CONDUCTIVE INK

DESCRIPTION: 121-38 is a silver / carbon filled, electrically conductive ink and coating for application by screenprinting, dipping and syringe dispensing. The product features excellent adhesion to Kapton, Mylar, glass, Indium tin Oxide (ITO) sputtered surfaces and a variety of other substrates. Unlike conventional conductive materials, this product is very resistant to abrasion, scratching, flexing and creasing. Some applications for 121-38 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)	20,000 – 24,000
Filler	Carbon / Silver
Crease Resistance	Excellent
Volume Resistance, max. (Ω -cm)	0.00012
Sheet Resistivity (Ω /square/mil)	0.048
Hydrolytic Stability	Excellent
Useful Temperature Range ($^{\circ}$ C)	-55 to 200

SUGGESTED HANDLING & CURING: 121-38 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI thinner #102-03 Prior to use, be certain to mix well to resuspend 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 results or possible infringements on patents.

REVISION DATE: 11/14/00 REVISION: A