

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

T 978.391.4700
F 978.391.4705

123-44

SOLVENT-RESISTANT ELECTRICALLY CONDUCTIVE INK

DESCRIPTION: 123-44 is a one part, solvent-resistant, screen-printable, electrically conductive ink and coating. This product features excellent adhesion to Kapton, Mylar, glass, polycarbonate and a variety of other substrates. Unlike conventional conductive materials, this product is very resistant to acetone and methyl ethyl ketone (MEK). It is also very resistant to scratching and creasing. Some applications for 123-44 include, but are not limited to, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, membrane switches, electrical attachments for surface mounted devices, and anode coatings for tantalum capacitors. This product is pre-catalyzed with 119-44 to allow for low temperature curing. 123-44 is a pre-catalyzed version of 118-41.

TYPICAL CURED PROPERTIES:

Viscosity (cps)	18,000
Filler	Silver
Percent Silver (cured)	> 89
Crease Resistance	Excellent
Volume Resistance (ohm-cm)	0.000025
Sheet Resistivity (ohm/sq./mil)	0.010
Solderable	No
Hydrolytic Stability	Excellent
Useful Temperature Range (°C)	-55 to 200
Thermal Stability (°C)	Good to 200

SUGGESTED HANDLING & CURING: Store frozen to maintain consistent flow properties. Allow product to warm up to room temperature before opening container. 123-44 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI Thinner #203 and/or Thinner # 113-12. Prior to using, be certain to thoroughly mix product.

CURE SCHEDULE: 4 hours at 80°C or 2 hours at 100°C.
Pot Life: ~2 days at 25°C

End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf life: 1 week at 25°C or 6 months at -40°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.