



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

T 978.391.4700
F 978.391.4705

118-09A/B119-44

SOLVENT-RESISTANT ELECTRICALLY CONDUCTIVE INK

DESCRIPTION: 118-09A/B119-44 is a two component, solvent-resistant, electrically conductive ink, coating and adhesive suitable for screen-printing circuit lines. 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 methyl ethyl ketone. It is also very resistant to scratching and creasing. Some applications for 118-09A/B119-44 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, bus bars on Indium Tin Oxide sputtered surfaces, and anode coatings for tantalum capacitors. This product is designed for use in crossovers with CMI product 116-20, a UV curable dielectric.

MIX RATIO (by weight):

| | |
|---------------|----------------|
| Part A | B119-44 |
| 100 | 1.5 |

Pot Life at 25°C: up to 2 weeks.

MIXING INSTRUCTIONS: Premix 118-09 Part A, in original container prior to adding curing agent. Add B119-44 and mix until uniform. At this point the material may be thinned by adding small amounts of CMI 113-12 thinner.

TYPICAL CURED PROPERTIES:

| | |
|---------------------------------|-----------------|
| Viscosity (cps.) | 15,000 – 20,000 |
| Filler | Silver |
| Percent Silver (cured) | > 85 |
| Crease Resistance | Excellent |
| Volume Resistance (ohm-cm) | 0.00005 |
| Sheet Resistivity (ohm/sq./mil) | 0.019 |
| Solderable | No |
| Hydrolytic Stability | Excellent |
| Useful Temperature Range (°C) | -55 to +200 |
| Thermal Stability (°C) | Good to +280 |

CURE SCHEDULE:

| | |
|-------|---------|
| 80°C | 4 hrs. |
| 100°C | 1 hr. |
| 125°C | 30 min. |
| 150°C | 15 min. |
| 175°C | 10 min. |

STORAGE: Shelf life: 12 months at 25°C, in unopened, unmixed containers.

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. **Note:** It is not unusual for crystallization of the Part B to occur. Warm to 40-45°C in a water bath to return the material to its original viscosity. The crystallization does not affect the performance of the product in any way.

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 particular application or possible infringements on patents.

REVISION DATE: 06/19/18 REVISION: G