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## 128-18A/B119-44

## SOLVENT RESISTANT ELECTRICALLY CONDUCTIVE FINE LINE EPOXY INK

**DESCRIPTION:** 128-18 is a two component, solvent-resistant, electrically conductive ink suitable for screenprinting, syringe dispensing, and jet dispensing circuits with fine line widths and spacing. This product features excellent adhesion to ITO coated surfaces, polyimide, polyester, glass, polycarbonate and other substrates. This product is very resistant to methyl ethyl ketone and other aggressive solvents and is also very resistant to scratching and creasing. Some applications for 128-18 include, but are not limited to, touch screen bus bars, solar cell grid lines, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, and membrane switches. This product is designed for use in crossovers with CMI product 116-20, a UV curable dielectric or 118-08, a thermal cure dielectric. 128-18 is a fine line version of 118-09C and a reduced shine version of 125-26C optimized for jet dispensing.

MIX RATIO (by weight): Part A Part B119-44 100

Pot Life: 2 weeks

MIXING INSTRUCTIONS: Premix 128-18 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 120-08 thinner.

## **TYPICAL CURED PROPERTIES:**

Viscosity (cps, 10/s, 25°C)	30,000
Filler	Silver
Percent Silver (cured)	> 85
Crease Resistance	Excellent
Sheet Resistivity (ohm/sq./mil)	≤ 0.025
Solderable	After plating
Hydrolytic Stability	Excellent
Useful Temperature Range (°C)	-55 to +200
Thermal Stability (°C)	Good to +280

SUGGESTED HANDLING AND CURING INSTRUCTIONS: Material is ready to use as received. Remove product from freezer and allow material to warm to room temperature before opening container. Good results are obtained when product is cured at one of the following schedules, but end user is advised to experimentally determine temperature and time best suited for individual applications.

Temp. (°C)	<u>Time</u>
100	60 min.
125	30 min.
150	15 min.
175	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: 05/23/19 REVISION: A**