

## 127-39

### SCREEN-PRINTABLE CONDUCTIVE CARBON INK

**DESCRIPTION:** 127-39 is a one component, electrically conductive, solvent-resistant ink and coating designed for screen-printing and syringe dispensing. This product features a high degree of flexibility and excellent adhesion to Kapton®, Mylar®, glass, polycarbonate ITO coated substrates as well as a variety of other substrates. 127-39 has the unique ability to adhere well to difficult to stick to surfaces such as silicone hard-coated acrylic and polycarbonate. Unlike many conductive inks 127-39 is resistant to harsh solvents such as MEK, high humidity environments including boiling water, and is resistant to aging and UV exposure.

#### TYPICAL PROPERTIES:

Viscosity (cps)	20,000 – 25,000
Filler	Carbon
Volume Resistance ( $\Omega$ -cm, MAX)	0.13
Sheet Resistance ( $\Omega$ /sq./mil, MAX)	50
Pencil Hardness	$\geq 5H$
Solderable	No
Hydrolytic Stability	Excellent
Useful Temperature Range ( $^{\circ}C$ )	-55 to +250
Thermal Stability ( $^{\circ}C$ )	Good to +325

**SUGGESTED HANDLING AND CURING INSTRUCTIONS:** Material is ready to use as received. Further thinning may be accomplished by mixing in small amounts of 102-03. Remove product from freezer and allow to thaw to room temperature before opening container. Good results can be achieved at a variety of cure temperatures and cure times such as those listed below. 127-39 is not recommended for applications that cannot cure above 125 $^{\circ}C$ . End user is advised to experiment and determine the best cure schedule for their application.

Time	Temperature ( $^{\circ}C$ )
1 hour	125
30 mins	150
15 mins	175

**STORAGE:** Shelf life: Up to 4 days at 25 $^{\circ}C$  or 6 months at -10 $^{\circ}C$

**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 suitability in particular application or possible infringements on patents.*

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