



## 124-46

### EXTREMELY CONDUCTIVE INK

**DESCRIPTION:** 124-46 is an ink/coating with extremely high electrical conductivity for application by screen-printing, dipping and syringe dispensing. The product features excellent adhesion to Kapton, Mylar, glass and a variety of other substrates. **The superior conductivity of this product allows the end user to print narrower and/or longer circuit trace lines without compromising overall maximum ohm values.** The proper use of this feature can result in a significant cost saving. Unlike conventional conductive materials, this product is very resistant to abrasion, scratching, flexing and creasing. Some applications for 124-46 include, but are not limited to, RFID antennae, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, membrane switches and coatings for tantalum capacitors.

#### TYPICAL PROPERTIES:

Viscosity (cps)	28,000 – 30,000
Filler	Silver
Percent Silver (cured)	> 84
Crease Resistance	Excellent
Volume Resistance, max. ( $\Omega$ -cm)	0.00003
Sheet Resistivity ( $\Omega$ /square/mil)	0.008
Hydrolytic Stability	Excellent
Useful Temperature Range ( $^{\circ}$ C)	-55 to 200

**SUGGESTED HANDLING & CURING:** 124-46 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI thinner #112-18, #112-19 and/or #105-36. Prior to use, be certain to mix well to re-suspend silver. **Best properties** for most applications result when cured for 3 to 5 minutes at 110 $^{\circ}$ C. Excellent properties are also obtained on a variety of substrates by curing at temperatures ranging from 50 $^{\circ}$ C to 175 $^{\circ}$ C. End user is advised to experimentally determine temperature and time best suited for individual applications.

**STORAGE:** Shelf life: 2 months at 25 $^{\circ}$ C; or 6 months at 5 $^{\circ}$ C; or 12 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.