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## 127-48

## SCREEN-PRINTABLE ELECTRICALLY CONDUCTIVE INK

**DESCRIPTION**: 127-48 is a screen-printable, electrically conductive ink suitable for application by stamping, screen-printing, dipping and syringe dispensing. This product features excellent adhesion to Kynar, Kapton, Mylar, polycarbonate, glass and many fabrics. 127-48 can also be used on low surface energy coatings such as transparent conductive oxides. Unlike conventional conductive materials, this product is very resistant to flexing and creasing and is designed to be used in the manufacturing of printed circuits on washable textiles. Some applications for 127-48 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.

## **TYPICAL CURED PROPERTIES:**

Viscosity (cps.) 26,000 - 30,000

Filler Silver
Percent Silver, cured > 82

Crease Resistance Excellent

Volume Resistance, max.  $(\Omega$ -cm) 0.000065

Sheet Resistivity  $(\Omega/\text{sq/mil})$  0.025

Hydrolytic Stability Excellent

Useful Temperature Range (°C) -55 to +200

**SUGGESTED HANDLING & CURING**: 127-48 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of thinner 120-08. Prior to using, be certain to resuspend silver. Best properties for most substrates result when cured for 15 to 30 minutes at 125°C. Higher temperatures will yield lower resistances. When using low surface energy substrates higher curing temperatures yield better adhesion. Using maximum curing temperatures is recommended. End user is advised to experimentally determine temperature and time best suited for individual applications.

**STORAGE**: Shelf Life - 1 year at 21°C in tightly sealed 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.