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## 127-48E

### SCREEN-PRINTABLE CONDUCTIVE MEDICAL ELECTRODE INK

**DESCRIPTION:** 127-48E 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. 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 127-48E include, but are not limited to, transdermal drug delivery, ECG electrodes, tens electrodes, and muscle stimulator electrodes.

#### **TYPICAL CURED PROPERTIES:**

Viscosity (cps.)	26,000 - 30,000
Filler	Silver/Silver Chloride
Crease Resistance	Excellent
Volume Resistance, max. ( $\Omega$ -cm)	0.0002
Sheet Resistivity ( $\Omega$ /sq./mil)	0.05
Hydrolytic Stability	Excellent
Useful Temperature Range ( $^{\circ}$ C)	-55 to +200

**SUGGESTED HANDLING & CURING:** 127-48E 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 $^{\circ}$ 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 -  $\leq$  4 weeks at 25 $^{\circ}$ C; or 6 months at -10 $^{\circ}$ C; or 12 months at -40 $^{\circ}$ 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.