



Creative Materials, Inc.  
12 Willow Road  
Ayer, MA 01432

T 978.391.4700  
F 978.391.4705

## 127-48LR

### MACHINE WASHABLE CONDUCTIVE INK

**DESCRIPTION:** 127-48LR is an electrically conductive ink/coating for application by screen-printing, dipping and syringe dispensing. The product features excellent adhesion to polycarbonate, Kapton, Mylar, glass and a variety of other substrates. Unlike conventional conductive materials, this product is very resistant to abrasion, scratching, flexing and creasing. Some applications for 127-48LR include, but are not limited to, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, and membrane switches. 127-48LR is a machine washable version of 124-50 designed for wearable electronic applications.

#### TYPICAL PROPERTIES:

Viscosity (cps)	15,000 – 20,000
Filler	Carbon
Crease Resistance	Excellent
Volume Resistance, max. ( $\Omega$ -cm)	0.1
Sheet Resistivity ( $\Omega$ /square/mil)	40
Hydrolytic Stability	Excellent
Useful Temperature Range ( $^{\circ}$ C)	-55 to +200

**SUGGESTED HANDLING & CURING:** 127-48LR is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI 120-08 thinner. Prior to use, be certain to mix well to re-suspend fillers. **Best properties**, for most applications, result when cured for 3 to 5 minutes at 125 $^{\circ}$ 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.

If stored in freezer, allow container to reach room temperature before opening to prevent any moisture from forming on product surface.

**STORAGE:** Shelf life: 6 months at 5 $^{\circ}$ C; or 9 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.

*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 a particular application or possible infringements on patents.*

REVISION DATE: 1/11/18 REVISION: A