

Creative Materials, Inc. 12 Willow Road Ayer, MA 01432 ISO 9001 CERTIFIED ISO 14001 CERTIFIED

T 978.391.4700 F 978.391.4705

128-09(LP)

LOW PRESSURE VARIABLE RESISTOR INK

<u>DESCRIPTION</u>: 128-09(LP) is a solvent based, electrically conductive ink that decreases in resistance as pressure is increased. Along with superior resistance to flexing and creasing, this product features excellent adhesion to Kapton, PET, Glass and a variety of other substrates. Some applications for 128-09(LP) include, but are not limited to, high sensitivity pressure transducers and membrane switches. This material is designed to be blended with the relatively high resistance 128-09(MP) to achieve a modified conductivity.

TYPICAL CURED PROPERTIES:

Viscosity at 25°C (cps.) 30,000

Thixotropic Index 6

Filler Carbon Specific Gravity ($H_2O = 1$) 1.05

Crease Resistance Excellent

Sheet Resistivity Max (Ω/sq/mil) 200

Useful Temperature Range (°C) -55 to +250

Thermal Stability (°C) Good to 325

SUGGESTED HANDLING & CURING: Although 128-09(LP) is ready to be used as supplied, prior to using, be certain to resuspend the filler. Further thinning may be accomplished by adding small amounts of thinner 120-08. This product is intended to be screen-printed through a 230-mesh count screen or tighter, with emulsion thicknesses less than 30 microns; for a target cured applied thickness of less than 12 microns.

<u>Best</u> properties for most substrates result when cured for 5-10 minutes at 140°C, however most mechanical properties develop with 50°C temperatures, while solvent resistance requires uninterrupted cure schedules with temperatures in excess of 225°C. Be advised that solvent resistance does not fully develop when blended with 128-09(MP) in any proportion. End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf Life of 3 months at 25°C, or 6 months at -10°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 results or possible infringements on patents.

REVISION DATE: 11/08/18 REVISION: A