



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

www.creativematerials.com

ISO 9001 CERTIFIED

T 978.391.4700
F 978.391.4705

122-13

PAD-PRINTABLE, ELECTRICALLY CONDUCTIVE INK

DESCRIPTION: 122-13 is a pad-printable, silver filled, acrylic based, ink and coating designed for producing fine resolution, electrically conductive traces on rigid and flexible circuit boards. This material provides excellent adhesion to aluminum, glass, Mylar, Kapton, and a variety of other substrates. Some additional applications for 122-13 include, but are not limited to, EMI/RFI shielding, polymer thick film circuitry, membrane switches and circuit repair. Unlike conventional conductive materials the 122-13 provides a high degree of Isopropyl Alcohol resistance. 122-13 is a version of CMI 121-49 that provides for a lower electrical resistance.

TYPICAL CURED PROPERTIES:

| | |
|--|-------------|
| Viscosity (cps.) | 4,000-6,000 |
| Filler | Silver |
| Percent Silver, cured | >85 |
| Crease Resistance | Good |
| Volume Resistivity (Ω -cm) | 0.00018 |
| Sheet Resistivity (Ω /sq./mil) | 0.07 |
| Solderable | No |
| Hydrolytic Stability | Excellent |
| Useful Temperature Range ($^{\circ}$ C) | -55 to +150 |

SUGGESTED HANDLING & CURING: 122-13 is ready to use as supplied. Further thinning may be accomplished by adding small amounts CMI Thinner # 113-39, or CMI Retarder # 114-20, or CMI # 114-28 Thinner. Prior to using, be certain to resuspend silver. The ultimate conductivity, and chemical resistance is obtained by curing at 150 $^{\circ}$ C for 5-10 minutes. End user is advised to experimentally determine the cure schedule best suited for the individual application.

STORAGE: Shelf Life: 6 months at 25 $^{\circ}$ 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 results or possible infringements on patents.

REVISION DATE: 9/10/01 REVISION: A