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## 116-26

### ELECTRICALLY CONDUCTIVE NICKEL INK

**DESCRIPTION:** 116-26 is a nickel filled, electrically conductive ink, coating and adhesive suitable for screen printing very narrow circuit lines. This product features excellent adhesion to Kapton, Mylar, glass and a variety of other substrates. Unlike conventional conductive materials, this product is very resistant to abrasion and scratching. Some applications for 116-26 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 for bonding to Indium Tin Oxide (ITO) sputtered surfaces. 116-26 can be further cross-linked with B187 curing agent for applications requiring resistance to solvents and high humidity. Refer to handling instructions for additional information. 116-26 is a nickel filled version of 102-05F.

#### TYPICAL CURED PROPERTIES:

Consistency	Smooth Paste
Filler	Nickel
Percent Nickel (cured)	80
Crease Resistance	Excellent
Volume Resistance ( $\Omega$ -cm)	0.13
Sheet Resistivity ( $\Omega$ /sq./mil)	50.0
Solderable	No
Solvent Resistance	Excellent
Hydrolytic Stability	Excellent
Useful Temperature Range ( $^{\circ}$ C)	-55 to 200
Thermal Stability ( $^{\circ}$ C)	Good to 325
Coverage, wet ( $\text{in}^2$ /gm/mil)	28.0
Specific Gravity	2.52

**SUGGESTED HANDLING & CURING:** 116-26 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI Thinner #203 and/or CMI Thinner # 113-12. Prior to using, be certain to resuspend filler. Best properties, for most applications, result when cured for 1 hour at 175 $^{\circ}$ C. Good properties are obtained on a variety of substrates by curing at temperatures ranging from 50 $^{\circ}$ C to 150 $^{\circ}$ C. NOTE: Add 1phr B187 catalyst when using low temperature cures. The use of B187 is suggested to impart a high degree of chemical resistance to the conductive lines. End user is advised to experimentally determine temperature and time best suited for individual applications.

**STORAGE:** Shelf life: 4 months at 25 $^{\circ}$ C; or 6 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.*

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