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119-21

PAD-PRINTABLE, SOLVENT-RESISTANT ELECTRICALLY CONDUCTIVE INK

DESCRIPTION: 119-21 is a pad-printable, solvent-resistant, electrically conductive ink and coating, suitable for pad-printing very narrow circuit lines. This product features excellent adhesion to Kapton, heat stabilized polyester, glass and a variety of other substrates. Unlike conventional conductive materials, this product is very resistant to acetone and methyl ethyl ketone. It is also very resistant to scratching and creasing. Some applications for 119-21 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 anode coatings for tantalum capacitors. 119-21 is a pad-printable version of 118-41.

TYPICAL CURED PROPERTIES:

Viscosity (cps)	10,000-12,000
Filler	Silver
Percent Silver (cured)	> 86
Crease Resistance	Excellent
Volume Resistance (Ω -cm)	0.000025
Sheet Resistivity (Ω /sq./mil)	0.010
Solderable	No
Hydrolytic Stability	Excellent
Useful Temperature Range ($^{\circ}$ C)	-55 to 200
Thermal Stability ($^{\circ}$ C)	Good to 200

SUGGESTED HANDLING & CURING: 119-21 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI Thinner #113-39 (fast evaporating) and/or Thinner # 114-20(slow evaporating). Prior to using, be certain to resuspend silver. Best properties, for most applications, result when cured for 45 minutes at 160 $^{\circ}$ C or 30 minutes at 175 $^{\circ}$ C. The use of B119-44 accelerator will allow for lower temperature curing providing good properties when cured from 50 $^{\circ}$ C to 150 $^{\circ}$ C. End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf life: 2 months at 25 $^{\circ}$ C; or 4 months at 5 $^{\circ}$ C; or 6 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.