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## 125-17M

### SCREEN-PRINTABLE, SOLVENT RESISTANT, FLEXIBLE, UV CURABLE, COATING

**DESCRIPTION:** 125-17M is a colorless, matte finish, screen-printable, solvent-resistant, flexible, ultraviolet curable dielectric coating that is used as a protective, insulating layer over, or between, polymer thick film conductive inks in the manufacture of membrane switches and flex circuits. This coating can be used on a variety of substrates such as polycarbonate, treated and untreated polyesters, Kapton, epoxy/glass PC boards, glass and Indium Tin Oxide sputtered surfaces. A void-free coating is obtained that has good resistance to humidity, temperature and solvents. 125-17M is designed for use in crossover applications with various CMI conductive inks, including 118-09A/B, 118-41, 114-01, 112-15, 125-15, 125-13 and 112-48 just to name a few. Please consult Creative Materials' technical support when considering using 125-17M with other Creative Materials' conductive inks or adhesives.

**OTHER COLORS AVAILABLE:** 125-17MB (Matte Blue), 125-17MG (Matte Green)

#### **BENEFITS**

- \* Low odor
- \* Excellent Flow Properties
- \* Fast Cure
- \* Zero VOC's (when fully cured)
- \* Excellent Printability

#### **PROPERTIES:**

Viscosity (cps)	20,000
Color	Matte, Colorless
Dielectric Strength (volts/mil)	365
Volume Resistivity (ohm-cm)	$7.1 \times 10^{15}$
Dielectric Constant (1 kHz)	4.3
Dielectric Factor (60 Hz)	0.018
Solids Content (%)	100
Specific Gravity (g/cc)	1.29
Screen Types	Polyester or Stainless Steel
Screen Mesh*	200 – 400 Stainless Steel 170 – 270 Polyester
Coverage @ 1 mil dry (in <sup>2</sup> /g.)**	50

\* Screen mesh used will vary depending on end-user application and equipment. Two dielectric applications are highly recommended for crossovers.

\*\* Coverage will vary depending on screen mesh, process and material.

**SUGGESTED HANDLING & CURING:** Material is ready to use as received. Cure using a 200-300 watt/inch mercury vapor lamp. Speed of cure will vary depending upon available energy. Typical cure time ranges from a few seconds to 1 minute when work is positioned 6-10 inches from lamp. Faster curing can be accomplished by moving lamp closer to work or increasing lamp intensity. When applying two layers, it is sometimes desirable to under-cure the first layer so as to improve interlayer adhesion.

**STORAGE:** Shelf Life: 6 months at 25°C. Some filler may settle during storage. Mix well prior to using to re-suspend filler.

**SAFETY and 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.*

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