



Creative Materials, Inc.  
141 Middlesex Road  
Tyngsboro, MA 01879

T 978.649.4700  
F 978.649.2040

## **124-14 BLUE DIELECTRIC MOISTURE BARRIER COATING**

**DESCRIPTION:** 124-14 is a flexible, electrically insulating moisture barrier coating suitable for application by stamping, screen printing, dipping and syringe dispensing. This product features excellent adhesion to Kapton, Mylar, glass, and a variety of other surfaces. Unlike conventional insulating materials, this product is very resistant to water vapor and oxygen transmission. Some uses for 124-14 include, but are not limited to, printing inks, coatings for polyimide flexible circuits/polymer thick film circuitry, and other applications requiring outstanding barrier or resistance properties.

**TYPICAL CURED PROPERTIES:**

Consistency	Thick Liquid
Crease Resistance	Excellent
Volume Resistivity ( $\Omega$ -cm)	$1 \times 10^{11}$
Water Vapor Transmission (g/100 in <sup>2</sup> /24 hrs)	0.10
Tensile Strength (psi)	7500
Elongation (%)	10

**SUGGESTED HANDLING & CURING:** 124-14 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of butyl cellosolve acetate or CMI 102-03. Best properties for most applications result when cured for several minutes at 100°C to 130°C. Good properties are obtained on a variety of substrates by curing at temperatures ranging from 50°C to 150°C. End user is advised to experimentally determine temperature and time best suited for individual applications. Films that are readily attacked by the solvents in 124-14 generally do not make good substrates. Solvent migration into the substrate results in drying problems and reduced barrier properties. It is important to completely remove all solvent for best barrier properties. Best overall results are obtained at 0.1 to 0.3 mils dry film thickness. Thicker coatings may be required over rougher or more porous substrates. Thicker coatings can retain solvents and/or blister if dried too rapidly.

**STORAGE:** Shelf Life: 6 months at 25°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: 12/16/05 REVISION: A