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ISO 9001 CERTIFIED

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118-44

PRESSURE VARIABLE RESISTOR INK

DESCRIPTION: 118-44 is an electrically conductive ink and coating that decreases in resistance as pressure is increased. This material is suitable for application by screen-printing, dipping and syringe dispensing. The 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, scratching, flexing and creasing. Some applications for 118-44 include, but are not limited to, pressure transducers and pressure sensitive membrane switches. 118-44 can be blended with 112-48 or 117-34 to alter the initial and final resistance (under pressure) of the material.

TYPICAL PROPERTIES:

Viscosity (cps)	40,000 - 45,000
Crease Resistance	Excellent
Sheet Resistivity (ohm/sq/mil)	
- without pressure	10 Meg
- with pressure	as low as 300K
Hydrolytic Stability	Excellent

Useful Temperature Range (°C) -55 to 200

SUGGESTED HANDLING & CURING: 118-44 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI thinner #112-18, and/or #112-19. Prior to use, be certain to mix well to re-suspend fillers. **Best properties**, for most applications, result when cured for 3 to 5 minutes at 110°C. Excellent properties are also obtained on a variety of substrates by curing at temperatures ranging from 50°C to 175°C. End user is advised to experimentally determine temperature and time best suited for individual applications.

TYPICAL CONSTRUCTION:



STORAGE: Shelf life: 2 months at 25°C; or 6 months at 5°C; or 12 months at -10°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.