



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

T 978.649.4700  
F 978.649.2040

## 124-39

### **CARBON FILLED, WATERBORNE, LOW V.O.C., SCREEN-PRINTABLE, CONDUCTIVE INK & COATING**

**DESCRIPTION:** 124-39 is a carbon filled waterborne, low V.O.C., electrically conductive ink and coating. This product features adhesion to Kapton, glass, and a variety of other surfaces. Unlike conventional conductive materials, this product is very resistant to flexing and creasing. Some applications for 124-39 include, but are not limited to, medical electrodes, polymer thick film circuitry, and membrane switches and static elimination.

#### **TYPICAL CURED PROPERTIES:**

|  |             |
|--|-------------|
| Viscosity (cps.)   | 3500        |
| Crease Resistance  | Excellent   |
| Sheet Resistivity, 100°C cure ( $\Omega$ /sq./mil. max.) | 20          |
| Solderable   | No          |
| Hydrolytic Stability                                     | Excellent   |
| Useful Temperature Range (°C)                            | -55 to +140 |
| Thermal Stability (°C)                                   | Good to 175 |
| V.O.C.'s grams/liter                                     | 139         |

**SUGGESTED HANDLING & CURING:** Before using, mix well to re-suspend filler. This product can be thinned with distilled water for application by rotogravure and flexographic printing techniques. Best properties are obtained on a variety of substrates by curing for **10 minutes at 100°C**. Good 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.

**STORAGE:** Shelf Life: 6 months at 21°C. **DO NOT ALLOW TO FREEZE.**

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.

REVISION DATE: 9/26/07 REVISION: A