

Creative Materials, Inc. 12 Willow Road Ayer, MA 01432 ISO 9001 CERTIFIED

T 978.391.4700 F 978.391.4705

## 123-20

## NICKEL FILLED ELECTRICALLY CONDUCTIVE ADHESIVE

<u>DESCRIPTION:</u> 123-20 is a flexible, nickel-filled electrically conductive adhesive. This product features excellent adhesion to Kapton, Mylar, glass and a variety of other substrates. Unlike conventional conductive materials, this product is very resistant to flexing and creasing. Product can be rebonded many times by simply applying heat and slight pressure. Some applications for 123-20 include, but are not limited to, electrical attachments for surface mounted devices and heat-sealing openings in emi/rfi enclosures. 123-20 is useful for applications requiring flexibility at very low temperatures.

## **TYPICAL CURED PROPERTIES:**

Consistency Thick Liquid Filler Nickel Crease Resistance Excellent Volume Resistance ( $\Omega$ -cm) 0.5 Sheet Resistivity ( $\Omega$ /sq./mil) 200 Solderable No

Hydrolytic Stability Excellent
Useful Temperature Range (°C) -55 to 120
Thermal Stability (°C) Good to 200

**SUGGESTED HANDLING & CURING:** 123-20 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI Thinner #203 or CMI thinner 112-19. Prior to using, be certain to resuspend nickel. Best properties, for most applications, result when allowed to dry at room temperature followed by curing for 5-10 min. at 175°C. Good properties are obtained on a variety of substrates by curing at temperatures ranging from 50°C to 175°C. When used as a sealant, apply adhesive to surfaces to be bonded and dry for several minutes at 150°C, then place substrates together while heating and applying slight pressure. End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf life: 6 months at 25°C; or 9 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.