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128-33

ELECTRICALLY CONDUCTIVE INK AND ADHESIVE

DESCRIPTION: 128-33 is a single component, silver filled, electrically conductive epoxy ink and adhesive suitable for application by syringe dispensing and pin transfer. This product is designed for assembling electrical components and features exceptional pot life, flexibility, and chemical resistance compared to typical conductive adhesives. With its unique balance of properties 128-33 is well-suited for bonding on a wide range of substrates including copper, silicon, glass, and gold among many others.

TYPICAL MATERIAL PROPERTIES:

| | |
|--|--------------|
| Viscosity (CP-51, cps) | 11,000 |
| Filler | Silver |
| Percent Silver, cured | 72 – 76 |
| Glass Transition Temp. (°C) | 89 |
| Die Shear Strength (psi) | > 2,000 |
| Adhesive Strength (Au to Cu, lb.-F) | > 8 |
| Volume Resistivity (Ω -cm, max.) | 0.00021 |
| Sheet Resistivity (Ω /sq./mil, max.) | 0.083 |
| Thermal Conductivity (W/m-K) | 3.1 |
| Useful Temperature Range (°C) | -55 to +230 |
| Thermal Stability (°C) | Good to +280 |

SUGGESTED HANDLING: Before using 128-33 should be stirred gently to ensure homogeneity. For syringes see [syringe handling guidelines](#) for suggestions on maintaining suspension over long term storage.

CURING AND BONDING:

Apply adhesive to surface to be bonded by hand and/or automatic method. Assemble and attach with slight pressure to ensure good mating of surfaces and formation of fillet. Best properties for most applications result when cured for 15 minutes at 195°C. Good properties are obtained on a variety of substrates by curing at temperatures ranging from 150°C to 230°C.

End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf Life: Up to 2 weeks at 25°C, up to 2 months at 0°C, up to 6 months at -20°C, or up to 1 year at -40°C in bulk containers. Syringes must be stored at -40°C. See [syringe handling guidelines](#) for recommendations on storage and maintaining homogeneity of material over long-term storage.

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: 7/01/20 REVISION: A