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## 110-19

### POLYIMIDE ELECTRICALLY CONDUCTIVE INK AND ADHESIVE

**DESCRIPTION:** 110-19 is a single component, silver filled, electrically conductive polyimide ink and adhesive suitable for application by screen printing and syringe dispensing. This product is designed for assembling electrical components and for high-performance aerospace applications requiring low outgassing at elevated temperatures. Due to its high glass transition and high modulus it is well-suited for applications requiring low damping. The cure schedule allows for rapid processing and the resulting bond exhibits excellent thermal stability and adhesion at high temperatures.

**TYPICAL MATERIAL PROPERTIES:**

Viscosity (cps)	32,500
Filler	Silver
Percent Silver, cured	> 81
Glass Transition Temp. (°C)	275
Flexural Strength (MPa, 25°C)	135
Flexural Modulus (GPa, 25°C)	3.75
Volume Resistivity (Ω-cm, max.)	0.0001
Sheet Resistivity (Ω/sq./mil, max.)	0.04
T-Shear Strength (psi)	> 1,250
Hydrolytic Stability	Excellent
Thermal Conductivity (W/m-K)	8.13
Useful Temperature Range (°C)	-55 to +270
Thermal Stability (°C)	Good to +325

**SUGGESTED HANDLING:** Before using 110-19 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 30 minutes at 150°C followed by a post cure of 30 minutes at 250°C. Good properties are obtained on a variety of substrates by curing at temperatures ranging from 150°C to 250°C.

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

**STORAGE:** Shelf Life: 1 year at -20°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.*

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