

Number of Components:	Two	Minimum Bond Line Cure Schedule*:	
Mix Ratio By Weight:	10:3	80°C	2 Hours
Specific Gravity:		23°C	2 Days
Part A	1.34		
Part B	1.08		
Pot Life:	2 Hours		
Shelf Life:	One year at room temperature		

*Note: Container(s) should be kept closed when not in use. For filled systems, mix contents of each container (A & B) thoroughly before mixing the two together. *Please see Applications Note available on our website.*

Product Description:

EPO-TEK[®] T7109-17 is a flexible, thermally conductive, electrically insulating epoxy paste designed for low stress and heat dissipation applications within the semiconductor, hybrid, electronic and optical industries. It is a replacement for EPO-TEK[®] T7109-14.

EPO-TEK[®] T7109-17 Advantages & Application Notes:

- Suggested applications:
 - Hybrids: bonding thermo-electric coolers (TEC's)
 - Power devices: adhesive for low-stress bonding of ferrites; laminating Cu foils to substrates
 - Optics:
 - Die-attaching μ -LCDs to PCB/substrate
 - Flexible potting of kapton flex PCB containing μ -LCD into the frame
 - Adhesive for OEM optics including profilometry
 - Semiconductor: glob top over IC and wire bonds
 - General: adhesive for Al, Cu, Kovar, ceramic, glass, PCBs, and most plastics
- Rheology allows deposition by hand, dispensers or screen printers.
- Alternative products exist. Contact techserv@epotek.com for your best recommendation.

Typical Properties: *(To be used as a guide only, not as a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results; Cure condition: 80°C/2 hours - 23°C/2 hours; * denotes test on lot acceptance basis)*

Physical Properties:	
*Color: Part A: Grey Part B: Clear/Colorless	Die Shear Strength @ 23°C: ≥ 2.8 Kg / 952 psi
*Consistency: Smooth paste	Degradation Temp. (TGA): 317°C
*Viscosity (@ 5 RPM/23°C): 30,000 – 70,000 cPs	Weight Loss:
Thixotropic Index: 2.3	@ 200°C: 0.67%
*Glass Transition Temp.(Tg): $\leq 20^\circ\text{C}$ (Dynamic Cure	@ 250°C: 1.15%
20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)	@ 300°C: 3.14%
Coefficient of Thermal Expansion (CTE):	Operating Temp:
Below Tg: 48×10^{-6} in/in/°C	Continuous: - 55°C to 150°C
Above Tg: 181×10^{-6} in/in/°C	Intermittent: - 55°C to 250°C
Shore A Hardness: 83	Storage Modulus @ 23°C: 2,600 psi
Lap Shear Strength @ 23°C: 574 psi	*Particle Size: ≤ 20 Microns
Thermal Properties:	
Thermal Conductivity: 0.50 W/mK	
Electrical Properties:	
Dielectric Constant (1KHz): 6.10	Volume Resistivity @ 23°C: $\geq 0.01 \times 10^{12}$ Ohm-cm
Dissipation Factor (1KHz): 0.146	

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