

Number of Components:	Two	Minimum Bond Line Cure Schedule*:	
Mix Ratio By Weight:	100:5	150°C	5 Minutes
Specific Gravity:		120°C	10 Minutes
Part A	2.10	100°C	20 Minutes
Part B	1.05	80°C	45 Minutes
Pot Life:	18 Hours		
Shelf Life:	Six months at room temperature		

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

Product Description:

EPO-TEK[®] H24 is a two component, electrically and thermally conductive epoxy adhesive designed for semiconductor die attach and hybrid micro-electronics assembly.

EPO-TEK[®] H24 Advantages & Application Notes:

- Low density silver-filled epoxy is ideal for ultrasound and acoustical applications of electronics.
- Extended pot-life allows for mass production and low waste.
- Suggested Applications:
 - Hybrid Micro-electronics: SMD and die attach on Au pads and ceramic substrates. Single step curing method of die and SMDs.
 - Electronics: compatible with piezo technologies for ultrasound circuits found in medical, industrial, and petrochemical industries.
 - Scientific / Life Sciences: geo-thermal, geo-seismic, infra-sound, as well as acoustical-optical circuits for interferometers and lasers.
 - Optical: bright and shiny silver flake is advantageous for LED die-attach.
- A smooth and creamy paste allows for automated or hand dispensing, pin transfer, or screen printing application methods of manufacture.

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: 150°C/1 hour; * denotes test on lot acceptance basis)

Physical Properties:	
*Color: Part A: Silver Part B: Amber	Weight Loss:
*Consistency: Smooth paste	@ 200°C: 0.04%
*Viscosity (@ 10 RPM/23°C): 15,000 – 23,000 cPs	@ 250°C: 0.04%
Thixotropic Index: 1.86	@ 300°C: 0.10%
*Glass Transition Temp.(Tg): ≥ 100°C (Dynamic Cure 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)	Operating Temp:
Coefficient of Thermal Expansion (CTE):	Continuous: - 55°C to 250°C
Below Tg: 28 x 10 ⁻⁶ in/in/°C	Intermittent: - 55°C to 350°C
Above Tg: 104 x 10 ⁻⁶ in/in/°C	Storage Modulus @ 23°C: 484,807 psi
Shore D Hardness: 76	Ions: Cl ⁻ 60 ppm
Lap Shear Strength @ 23°C: > 2000 psi	Na ⁺ 88 ppm
Die Shear Strength @ 23°C: ≥ 5 Kg / 1,700 psi	NH ₄ ⁺ 21 ppm
Degradation Temp. (TGA): 470°C	K ⁺ 8 ppm
	*Particle Size: ≤ 45 Microns
Electrical Properties:	
*Volume Resistivity @ 23°C: ≤ 0.02 Ohm-cm	
Thermal Properties:	
Thermal Conductivity: 0.67 W/mK	

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