

Number of Components:	Two	Minimum Bond Line Cure Schedule*:	
Mix Ratio By Weight:	1:1	150°C	5 Minutes
Specific Gravity:		120°C	15 Minutes
Part A	2.72	80°C	90 Minutes
Part B	4.33		
Pot Life:	3 Days		
Shelf Life:	Six months 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[®] H20E-8 is a two component, silver-filled epoxy system designed specifically for chip bonding in microelectronic and optoelectronic applications. It is a higher viscosity and higher thixotropic version of EPO-TEK[®] H20E.

EPO-TEK[®] H20E-8 Advantages & Application Notes:

- Especially recommended for use in high speed epoxy chip bonding systems where very fast cures are desired.
- Suggested for JEDEC Level III and II for plastic IC packaging.
- Capable of resisting TC wire bonding temperatures in the 300°C range.
- Ease of use: apply by dispensing, screen printing, or by hand.
- Especially suited for high power devices and high current flow. High power LEDs.
- Opto-electronic packaging material: LED, LCDs, and fiber optic components.

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: Silver	Weight Loss:
*Consistency: Thixotropic paste	@ 200°C: 0.25%
*Viscosity (@ 20 RPM/23°C): 10,000 – 20,000 cPs	@ 250°C: 0.37%
Thixotropic Index: 4.85	@ 300°C: 0.79%
*Glass Transition Temp.(Tg): ≥ 80°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: 26 x 10 ⁻⁶ in/in/°C	Intermittent: - 55°C to 350°C
Above Tg: 111 x 10 ⁻⁶ in/in/°C	Storage Modulus @ 23°C: 791,453 psi
Shore D Hardness: 66	Ions: Cl ⁻ 141 ppm
Lap Shear Strength @ 23°C: 1,216 psi	Na ⁺
Die Shear Strength @ 23°C: ≥ 5 Kg / 1,700 psi	NH ₄ ⁺ 265 ppm
Degradation Temp. (TGA): 470°C	K ⁺
	*Particle Size: ≤ 45 Microns
Electrical Properties:	
*Volume Resistivity @ 23°C: ≤ 0.0004 Ohm-cm	
Thermal Properties:	
Thermal Conductivity: 3.5 W/mK	

EPOXY TECHNOLOGY, INC.

14 Fortune Drive, Billerica, MA 01821-3972 Phone: 978.667.3805 Fax: 978.663.9782

www.EPOTEK.com

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