

Number of Components:	Single	Minimum Bond Line Cure Schedule*:	
Mix Ratio By Weight:	N/A	180°C	1 Hour
Specific Gravity:	3.65	165°C	1.5 Hours
Part A			
Part B			
Pot Life:	28 Days		
Shelf Life:	One year at -40°C		

Note: Container(s) should be kept closed when not in use. For filled systems, mix contents of container thoroughly.

*Please see Applications Note available on our website. * Material should be brought to room temperature before opening the container.

Product Description:

EPO-TEK[®] H35-175MPT is a single component, silver-filled epoxy for military hybrid die and component attach.

EPO-TEK[®] H35-175MPT Advantages & Application Notes:

- This epoxy can be classified as a higher viscosity version of EPO-TEK[®] H35-175MP, suggested for the following purposes:
 - Used for improved stencil printing via small apertures. (Not for dispensing)
 - Less flow-out between small pads like 0402 or 0603 caps and resistors
- Performs exceptionally well as a die attach for small chips such as GaAs, LEDs and diodes.
- Capable of resisting 260°C green reflow process, low outgassing in hermetic lid-seal processes near 300°C, and organic burn-in up to 150°C/1000 hours storage.
- Certified to MIL-STD 883/Test Method 5011 –yields low levels of water extractable monovalent ions such as Chlorides.
- Capable of JEDEC Level II die-attach packaging on die-paddles and lead-frames.
- Widely used epoxy; popular choice for silver-filled epoxies; opto-packaging, hybrids, and many types of substrates including kovar, ceramic and BT.

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: 180°C/1 hour; * denotes test on lot acceptance basis)

Physical Properties:	
*Color: Silver	Weight Loss:
*Consistency: Smooth thixotropic paste	*@ 200°C: 0.03%
*Viscosity (@ 2.5 RPM/23°C): 90,000 – 110,000 cPs	@ 250°C: 0.05%
Thixotropic Index: 4.6	@ 300°C: 0.13%
*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 200°C
Below Tg: 35 x 10 ⁻⁶ in/in/°C	Intermittent: - 55°C to 300°C
Above Tg: 123 x 10 ⁻⁶ in/in/°C	Storage Modulus @ 23°C: 423,781 psi
Shore D Hardness: 83	*Ions: Cl ⁻ < 200 ppm
Lap Shear Strength @ 23°C: 1,693 psi	Na ⁺ < 50 ppm
*Die Shear Strength @ 23°C: ≥ 10 Kg / 3,400 psi	NH ₄ ⁺ 32 ppm
Degradation Temp. (TGA): 354°C	K ⁺ < 50 ppm
	*Particle Size: ≤ 20 Microns
Electrical Properties:	
*Volume Resistivity @ 23°C: ≤ 0.0005 Ohm-cm	
Thermal Properties:	
Thermal Conductivity: 2.67 W/mK	

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