Product Information Sheet

EPO-TEK® EH100

Date:	September 2017
Rev:	V
No. of Components:	Two
Mix Ratio by Weight:	10 : 1
Specific Gravity:	Part A: 3.28 Part B: 0.97
Pot Life:	4 Hours
Shelf Life- Bulk:	One year at room temperature

Recommended Cure: 150°C / 1 Hour

Minimum Alternative Cure(s):
May not achieve performance properties listed below
150°C / 15 Minutes
100°C / 1 Hour
80°C / 3 Hours
23°C / 3 Days

NOTES:
- Container(s) should be kept closed when not in use.
- Filled systems should be stirred thoroughly before mixing and prior to use.
- Performance properties (rheology, conductivity, others) of the product may vary from those stated on the data sheet when bi-pak/syringe packaging or post-processing of any kind is performed. Epoxy's warranties shall not apply to any products that have been reprocessed or repackaged from Epoxy's delivered status/container into any other containers of any kind, including but not limited to syringes, bi-paks, cartridges, pouches, tubes, capsules, films or other packages.
- Syringe packaging will impact initial viscosity and effective pot life, potentially beyond stated parameters.
- A heat cure is recommended to achieve optimum properties.

Product Description: A two component, silver-filled epoxy designed for ITO interconnects in LCD packaging and assembly. It is a 3 mil glass-beaded version of EPO-TEK® E4110. It may also be used for semiconductor die-attach applications requiring a 3 mil stand-off.

Typical Properties: Cure condition: 150°C / 1 Hour Different batches, conditions & applications yield differing results.
Data below is not guaranteed. To be used as a guide only, not as a specification. * denotes test on lot acceptance basis

PHYSICAL PROPERTIES:			
* Color (before cure):	Part A: Silver	Part B: Clear/colorless	
* Consistency:	Smooth flowing paste		
* Viscosity (23°C) @ 100 rpm:	800 - 1,600	cPs	
Thixotropic Index:	N/A		
* Glass Transition Temp:	≥ 40	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE):			
Below Tg:	32	x 10^{-6} in/in°C	
Above Tg:	144	x 10^{-6} in/in°C	
Shore D Hardness:	60		
Lap Shear @ 23°C:	1,612	psi	
Die Shear @ 23°C:	≥ 5	Kg	1,778 psi
Degradation Temp:	380	°C	
Weight Loss:			
@ 200°C:	0.70	%	
Suggested Operating Temperature:	< 250	°C (Intermittent)	
Storage Modulus:	472,439	psi	
Ion Content:	Cl^-: 151 ppm	Na^+:	23 ppm
	NH_4^+: 23 ppm	K^+:	31 ppm
* Particle Size:	≤ 80	microns	

ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	1.4	W/mK
* Volume Resistivity @ 23°C:	≤ 0.0005	Ohm-cm
Volume Resistivity @ 23°C (23°C/3 Day Cure):	≤ 0.007	Ohm-cm

EPOXY TECHNOLOGY, INC.
14 FORTUNE DRIVE, BILLERICA, MA 01821 (978) 667-3805, FAX (978) 663-9782
www.epotek.com