



Product Information Sheet

EPO-TEK® H37-MPT

Date: September 2017
Rev: IV
No. of Components: Single
Mix Ratio by Weight: N/A
Specific Gravity: 3.37
Pot Life: 28 Days
Shelf Life- Bulk: One year at -40°C

Recommended Cure: 150°C / 1 Hour

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.

Product Description: A single component, silver-filled and electrically conductive adhesive designed for semiconductor die attach and bonding SMDs for hybrid microelectronic packaging. It is certified and lot accepted to the requirements of MIL-STD 883 / Test Method 5011. It can be used for opto-packaging including LEDs, laser and photo-diodes, and fiber optic circuit assembly.

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):	Silver		
* Consistency:	Smooth thixotropic paste		
* Viscosity (23°C) @ 2.5 rpm:	80,000-110,000	cPs	
Thixotropic Index:	N/A		
* Glass Transition Temp:	≥ 90	°C (Dynamic Cure: 20-300°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE):			
	Below Tg:	44	x 10 ⁻⁶ in/in°C
	Above Tg:	108	x 10 ⁻⁶ in/in°C
Shore D Hardness:	76		
Lap Shear @ 23°C:	1,696	psi	
* Die Shear @ 23°C:	≥ 10	Kg	3,556 psi
* Degradation Temp:	350	°C	
Weight Loss:			
	* @ 200°C:	0.01	%
Suggested Operating Temperature:	< 300	°C (Intermittent)	
Storage Modulus:	539,371	psi	
* Ion Content:	Cl:	< 200 ppm	Na*: < 50 ppm
	NH ₄ ⁺ :	53 ppm	K*: < 50 ppm
* Particle Size:	≤ 20 microns		
ELECTRICAL AND THERMAL PROPERTIES:			
Thermal Conductivity:	2.8	W/mK	
* Volume Resistivity @ 23°C:	≤ 0.0005	Ohm-cm	

This information is based on data and tests believed to be accurate. Epoxy Technology, Inc. makes no warranties (expressed or implied) as to its accuracy and assumes no liability in connection with any use of this product.

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