Preliminary Product Information Sheet

EPO-TEK® H67MP-T

Note: These are typical properties to be used as a guide only, not a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results.

Date: September 2017
Rev: IV
No. of Components: Single
Mix Ratio by Weight: N/A
Specific Gravity: 1.97
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, thermally conductive, electrically insulating epoxy which complies with the requirements of MIL-STD 883, Test Method 5011 for hybrid microelectronic packaging and assemblies. It may be used for bonding SMDs, die-attach, substrate-attach or general heat sinking. Meets MIL-STD-883, Method 5011. A thixotropic version of EPO-TEK® H67MP.

MATERIAL CHARACTERISTICS*:

PHYSICAL PROPERTIES:		Cure condition: 150°C / 1 Hour			
Color (before cure):		White			
Consistency:		Highly viscous paste			
Viscosity (23°C) @ 0.5 rpm:			609,761	cPs	
Thixotropic Index:			N/A		
Glass Transition Temp:			101	°C (Dynamic Cure: 20-300°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)	
Coefficient of Thermal Expansion (CTE):					
	Below Tg:		35	x 10^{-6} in/in°C	
	Above Tg:		93	x 10^{-6} in/in°C	
Shore D Hardness:			94		
Lap Shear @ 23°C:			> 2,000	psi	
Die Shear @ 23°C:			> 20	Kg	
Degradation Temp:			370	°C	
Weight Loss:					
	@ 200°C:		0.23	%	
	@ 250°C:		0.33	%	
	@ 300°C:		0.59	%	
Suggested Operating Temperature:			< 300	°C (Intermittent)	
Storage Modulus:			718,925	psi	
Ion Content:		Cl^-:	< 200 ppm	Na^+:	< 50 ppm
		NH_4^+:	71 ppm	K^+:	< 50 ppm
Particle Size:			≤ 20	microns	

ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	0.9	W/mK
Volume Resistivity @ 23°C:	≥ 8 x 10^{13}	Ohm-cm
Dielectric Constant (1KHz):	5.36	
Dissipation Factor (1KHz):	0.005	

The data above is INITIAL only - it may be changed at any time, for any reason without notice to anyone. It is provided only as a guide for evaluation/consideration.

* These material characteristics are typical properties that are based on a limited number of samples/batches. All properties are based on the cure indicated above. Some properties may vary as manufactured quantities are scaled up to commercialized production levels.

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