

## **Product Information Sheet**

## **EPO-TEK® H63**

Minimum Alternative Cure(s):

Date: September 2017 Recommended Cure: 150°C / 1 Hour

Rev: V

No. of Components: Single

Mix Ratio by Weight: N/A May not achieve performance properties listed below

Specific Gravity:1.79150°C / 30 MinutesPot Life:28 Days120°C / 1 Hour

Shelf Life- Bulk: One year refrigerated

## 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.

<u>Product Description:</u> A single component, electrically insulating, thermally conductive epoxy adhesive for semiconductor, hybrid packaging and electronic circuit assembly applications. It is a higher viscosity alternative to EPO-TEK® H62.

<u>Typical Properties:</u> 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):	Black	
* Consistency:	Smooth thixotropic paste	
* Viscosity (23°C) @ 10 rpm:	25,000-35,000	cPs
Thixotropic Index:	1.1	
* Glass Transition Temp:	≥ 120	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):		
Below Tg:	27	x 10 <sup>-6</sup> in/in°C
Above Tg:	125	x 10 <sup>-6</sup> in/in°C
Shore D Hardness:	91	
Lap Shear @ 23°C:	1,102	psi
Die Shear @ 23°C:	≥ 10	Kg 3,556 psi
Degradation Temp:	418	°C
Weight Loss:		
@ 200°C:	0.05	%
@ 250°C:	0.19	%
@ 300°C:	0.66	%
Suggested Operating Temperature:	< 350	°C (Intermittent)
Storage Modulus:	466,233	psi
* Particle Size:	≤ 50	microns

ELECTRICAL AND THERMAL PROPERTIES:				
Thermal Conductivity:	0.6	W/mK		
Volume Resistivity @ 23°C:	$\geq 3 \times 10^{13}$	Ohm-cm		
Dielectric Constant (1KHz):	4.75			
Dissipation Factor (1KHz):	0.021			