Product Information Sheet

EPO-TEK® 920

Date:	September 2017		**Recommended Cure: 150°C / 1 Hour**
Rev:	IV		
No. of Components:	Two		Minimum Alternative Cure(s):
Mix Ratio by Weight:	100 : 3		*May not achieve performance properties listed below*
Specific Gravity:	Part A: 2.24	Part B: 1.02	150°C / 5 Minutes
Pot Life:	5 Hours		120°C / 10 Minutes
Shelf Life- Bulk:	Six months at room temperature		100°C / 20 Minutes

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.

Product Description: A two component, high Tg, electrically insulating, thermally conductive epoxy designed for thermal management applications found in semiconductor, hybrid microelectronics, PCB, and optical industries. It can be an adhesive for mounting heat sinks and substrates, a seal for many types of packages, or a thermal potting compound. It is a NASA approved, low outgassing epoxy.

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: Grey	Part B: Amber
* Consistency:	Smooth paste	
* Viscosity (23°C) @ 20 rpm:	13,000-20,000	cPs
Thixotropic Index:	2.1	
* Glass Transition Temp:	≥ 90	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):		
Below Tg:	24	x 10^{-6} in/in°C
Above Tg:	117	x 10^{-6} in/in°C
Shore D Hardness:	90	
Lap Shear @ 23°C:	> 2,000	psi
Die Shear @ 23°C:	≥ 15	Kg 5,334 psi
Degradation Temp:	343	°C
Weight Loss:		
@ 200°C:	< 0.05	%
@ 250°C:	0.24	%
@ 300°C:	0.77	%
Suggested Operating Temperature:	< 300	°C (Intermittent)
Storage Modulus:	762,091	psi
* Particle Size:	≤ 50	microns

ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	1.0	W/mK
Volume Resistivity @ 23°C:	≥ 1 x 10^{14}	Ohm-cm
Dielectric Constant (1KHz):	5.19	
Dissipation Factor (1KHz):	0.008	

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