

Product Information Sheet

EPO-TEK® OD1001

Date: September 2017 Recommended Cure: 125°C / 1 Hour

Rev: VII

No. of Components: Single
Mix Ratio by Weight: N/A

Specific Gravity: 1.13

Pot Life: 28 Days

Shelf Life- Bulk: One year at -40°C

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, thermally and electrically insulating epoxy designed for low stress semiconductor and electronics packaging. Low Tg, several weeks of pot life and low modulus are a few of it traits. It is particularly suitable for bonding, sealing and potting ferrite cores in power device plastic packaging. Adhesion to PCBs, ceramics, most metals and lead-frames is very good.

<u>Typical Properties:</u> Cure condition: 125°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):		Cream	
* Consistency:		Smooth thin par	ste
* Viscosity (23°C) @ 100 rpm:		1,000 - 1,500	cPs
Thixotropic Index:		1.2	
* Glass Transition Temp:		≥ 35	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion	on (CTE):		
	Below Tg:	66	x 10 ⁻⁶ in/in°C
	Above Tg:	211	x 10 ⁻⁶ in/in°C
Shore D Hardness:		70	
Lap Shear @ 23°C:		> 1,800	psi
Die Shear @ 23°C:		≥ 15	Kg 5,334 psi
Degradation Temp:		355	°C
Weight Loss:			
	@ 200°C:	0.27	%
	@ 250°C:	0.64	%
	@ 300°C:	1.50	%
Suggested Operating Temperature:		< 275	°C (Intermittent)
Storage Modulus:		168,765	psi
* Particle Size:		≤ 10	microns

ELECTRICAL AND THERMAL PROPERTIES:					
Thermal Conductivity:	N/A				
Volume Resistivity @ 23°C:	$\geq 2 \times 10^{13}$	Ohm-cm			
Dielectric Constant (1KHz):	3.05				
Dissipation Factor (1KHz):	0.011				

OPTICAL PROPERTIES @ 23°C:		
Spectral Transmission:	< 50% @ 300 - 1,200	nm
Refractive Index:	1.5413 @589	nm