



## Product Information Sheet

### EPO-TEK® OE101

**Date:** September 2017  
**Rev:** IV  
**No. of Components:** Two  
**Mix Ratio by Weight:** 10 : 1  
**Specific Gravity:** Part A: 1.16 Part B: 1.02  
**Pot Life:** 4 Hours  
**Shelf Life- Bulk:** One year at room temperature

**Recommended Cure: 150°C / 1 Hour**

Minimum Alternative Cure(s):

*May not achieve performance properties listed below*  
150°C / 1 Minute  
125°C / 5 Minutes  
100°C / 10 Minutes  
80°C / 30 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 epoxy designed for low stress applications in fiber optic packaging, opto-electronics and semiconductors. It is a lower modulus version of EPO-TEK® 353ND.

**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: Clear yellow	Part B: Amber	
* Consistency:	Pourable liquid		
* Viscosity (23°C) @ 100 rpm:	1,500 - 2,500	cPs	
Thixotropic Index:	N/A		
* Glass Transition Temp:	≥ 65	°C	(Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):			
Below Tg:	41	x 10 <sup>-6</sup> in/in°C	
Above Tg:	210	x 10 <sup>-6</sup> in/in°C	
Shore D Hardness:	82		
Lap Shear @ 23°C:	> 2,000	psi	
Die Shear @ 23°C:	≥ 15	Kg	5,334 psi
Degradation Temp:	456	°C	
Weight Loss:			
@ 200°C:	0.60	%	
@ 250°C:	0.82	%	
@ 300°C:	1.22	%	
Suggested Operating Temperature:	< 300	°C	(Intermittent)
Storage Modulus:	358,643	psi	
Ion Content:		Na <sup>+</sup> :	6 ppm
	NH <sub>4</sub> <sup>+</sup> :	K <sup>+</sup> :	7 ppm
* Particle Size:	171 ppm		
	N/A		

ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	N/A	
Volume Resistivity @ 23°C:	≥ 1.5 x 10 <sup>13</sup>	Ohm-cm
Dielectric Constant (1KHz):	3.22	
Dissipation Factor (1KHz):	0.004	

OPTICAL PROPERTIES @ 23°C:		
Spectral Transmission:	> 50% @ 400	nm
	> 92% @ 600	nm
	> 97% @ 675	nm
Refractive Index:	1.5459 @ 589	nm

**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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