

**Date:** February 2021  
**Rev:** VI  
**No. of Components:** Two  
**Mix Ratio by Weight:** 10 : 1  
**Specific Gravity:** Part A: 1.06 Part B: 1.02  
**Pot Life:** 2 Hours  
**Shelf Life- Bulk:** One year at room temperature  
**Shelf Life- Syringe:** Six months at -40°C

**Recommended Cure: 150°C / 1 Hour**

**Minimum Alternative Cure(s):**  
*May not achieve performance properties below*  
 150°C / 2 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.
- **TOTAL MASS SHOULD NOT EXCEED 50 GRAMS**

**Product Description:** EPO-TEK® OE138 is a two component epoxy with intermediate viscosity range between EPO-TEK®353ND and EPO-TEK® 353ND-T. It is designed for semiconductor glob top applications, as well as use in medical and fiber optic industries.

**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: Tan	Part B: Amber	
* Consistency:	Smooth, pourable paste		
* Viscosity (23°C) @ 20 rpm:	4,000 - 7,000	cPs	
Thixotropic Index:	1.3		
* 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:	21	x 10 <sup>-6</sup> in/in°C
	Above Tg:	128	x 10 <sup>-6</sup> in/in°C
Shore D Hardness:	85		
Lap Shear @ 23°C:	> 2,000	psi	
Die Shear @ 23°C:	≥ 20	Kg	7,112 psi
Degradation Temp:	406	°C	
Weight Loss:			
	@ 200°C:	0.18	%
	@ 250°C:	0.60	%
	@ 300°C:	1.40	%
Suggested Operating Temperature:	< 300 °C (Intermittent)		
Storage Modulus:	392,573	psi	
Ion Content	Cl <sup>-</sup> : 334 ppm	Na <sup>+</sup> :	494 ppm
	NH <sub>4</sub> <sup>+</sup> : 4 ppm	K <sup>+</sup> :	ND
* Particle Size:	< 20 microns		

ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	N/A	
Volume Resistivity @ 23°C:	≥ 9 x 10 <sup>12</sup>	Ohm-cm
Dielectric Constant (1KHz):	3.18	
Dissipation Factor (1KHz):	0.003	

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**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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