



## Product Information Sheet

### EPO-TEK® 310M-2

**Date:** December 2017  
**Rev:** IV  
**No. of Components:** Two  
**Mix Ratio by Weight:** 10 : 2.2  
**Specific Gravity:** Part A: 1.11      Part B: 1.01  
**Pot Life:** 1.5 Hours  
**Shelf Life- Bulk:** One year at room temperature

**Recommended Cure: 65°C / 2 Hours**

Minimum Alternative Cure(s):

*May not achieve performance properties listed below*  
23°C / 24 Hours

#### 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, optically clear, flexible epoxy adhesive designed for optical applications within semiconductor and fiber optic industries. An alternative to EPO-TEK® 310M.

**Typical Properties:** Cure condition: 65°C / 2 Hours      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/colorless	Part B: Clear/colorless
* Consistency:	Pourable liquid	
* Viscosity (23°C) @ 100 rpm:	250 - 325	cPs
Thixotropic Index:	N/A	
* Glass Transition Temp:	≤ 30	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -40-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):		
Below Tg:	67	x 10 <sup>-6</sup> in/in°C
Above Tg:	201	x 10 <sup>-6</sup> in/in°C
Shore A Hardness:	65	
Lap Shear @ 23°C:	678	psi
Die Shear @ 23°C:	≥ 5	Kg      1,778 psi
Degradation Temp:	331	°C
Weight Loss:		
@ 200°C:	0.40	%
@ 250°C:	0.74	%
@ 300°C:	2.18	%
Suggested Operating Temperature:	< 250	°C (Intermittent)
Storage Modulus:	1,936	psi
* Particle Size:	N/A	

#### ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	N/A	
Volume Resistivity @ 23°C:	≥ 1.5 x 10 <sup>10</sup>	Ohm-cm
Dielectric Constant (1KHz):	5.23	
Dissipation Factor (1KHz):	0.115	

#### OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	> 98% @380-1660	nm
Refractive Index:	1.4947 @ 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.**

**EPOXY TECHNOLOGY, INC.**

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