



## Product Information Sheet

### EPO-TEK® 310M-1

**Date:** August 2019  
**Rev:** V  
**No. of Components:** Two  
**Mix Ratio by Weight:** 10 : 5.3  
**Specific Gravity:** Part A: 1.14      Part B: 1.05  
**Pot Life:** 2 Hours  
**Shelf Life- Bulk:** One year at room temperature  
**Shelf Life- Syringe:** Six months at -40°C

**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.
- **TOTAL MASS SHOULD NOT EXCEED 25 GRAMS**

**Product Description:** A two component, optically clear epoxy adhesive designed for optical, semiconductor and medical applications. Replacement for EPO-TEK® 310.

**Typical Properties:** Cure condition: varies as required      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/Light Yellow
* Consistency:	Pourable liquid	
* Viscosity (23°C) @ 100 rpm:	100-500	cPs
Thixotropic Index:	N/A	
* Glass Transition Temp:	≤ 30	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE):		
Below Tg:	60	x 10 <sup>-6</sup> in/in°C
Above Tg:	229	x 10 <sup>-6</sup> in/in°C
Shore D Hardness:	62	
Die Shear @ 23°C:	≥ 5	Kg    1,778 psi
Degradation Temp:	300 °C	
Weight Loss:		
@ 200°C:	6.63	%
@ 250°C:	7.96	%
Suggested Operating Temperature:	< 250 °C (Intermittent)	
Storage Modulus:	4,699	psi
Particle Size:	N/A	

#### OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	> 98% @ 360-1660	nm
Refractive Index:	1.5129 @ 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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