



Product Information Sheet

EPO-TEK® M10-D

Date: September 2017
Rev: II
No. of Components: Single
Mix Ratio by Weight: N/A
Specific Gravity: 1.35
Pot Life: 2 Weeks (closed container) **Dry Time:** > 1 Day
Shelf Life- Bulk: One year refrigerated

Recommended Cure: B-stage cure: 75°C/30 Minutes
Cure: 150°C/1 Hour

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.

Product Description: A single component, B-stageable epoxy paste for semiconductor, microelectronics, and optical assemblies. It can be used in hybrid assemblies for lid-sealing and substrate attach. In opto-packaging, it can be used as the main gasket seal of glass plates in LCDs, or for sealing filter windows onto opto-sensors.

Typical Properties: Cure condition: B-stage cure: 75°C/30 Minutes - Cure: 150°C/1 Hour Data below is not guaranteed.

Different batches, conditions & applications yield differing results. To be used as a guide only, not as a specification.

* denotes test on lot acceptance basis

PHYSICAL PROPERTIES:

* Color (before cure):	Tan		
* Consistency:	Slightly thixotropic paste		
* Viscosity (23°C) @ 50 rpm:	3,000 - 6,000	cPs	
Thixotropic Index:	9.2		
Glass Transition Temp:	80	°C	
Coefficient of Thermal Expansion (CTE):			
Below Tg:	35	x 10 ⁻⁶ in/in°C	
Above Tg:	128	x 10 ⁻⁶ in/in°C	
Shore D Hardness:	72		
Lap Shear @ 23°C:	580	psi	
Die Shear @ 23°C:	≥ 10	Kg	3,556 psi
Degradation Temp:	370	°C	
Weight Loss:			
@ 200°C:	1.31	%	
@ 250°C:	2.76	%	
@ 300°C:	5.75	%	
Suggested Operating Temperature:	< 300	°C (Intermittent)	
Storage Modulus:	576,738	psi	
* Particle Size:	≤ 20	microns	

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	0.4	W/mK
Volume Resistivity @ 23°C:	≥ 5 x 10 ¹¹	Ohm-cm
Dielectric Constant (1KHz):	4.32	
Dissipation Factor (1KHz):	0.114	

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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