

EPO-TEK® OM125

Technical Data Sheet For Reference Only Optical Epoxy

Date: September 2017

Rev: No. of Components: Two Mix Ratio by Weight: 10:3

Specific Gravity:

Part A: 1.16 Pot Life: < 1 Hour

Shelf Life- Bulk: One year at room temperature Recommended Cure: 80°C / 1 Hour

Minimum Alternative Cure(s):

May not achieve performance properties listed below

65°C / 2 Hours 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
- Syringe packaging will impact initial viscosity and effective pot life, potentially beyond stated parameters.

Product Description: EPO-TEK® OM125 is two component, high Tg, optical epoxy designed for bonding multi-mode fiber optic connectors.

Part B: 0.99

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/Co	lorless Part B: Blue
* Consistency:		Pourable liquid	
* Viscosity (23°C) @ 50 rpm:		2,400 - 5,400	cPs
Thixotropic Index:		N/A	
* Glass Transition Temp:		≥ 80	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expans	ion (CTE):		
-	Below Tg:	28	x 10 ⁻⁶ in/in°C
	Above Tg:	114	x 10 ⁻⁶ in/in°C
Shore D Hardness:		81	
Lap Shear @ 23°C:		808	psi
Die Shear @ 23°C:		≥ 20	Kg 7,112 psi
Degradation Temp:		367	°C
Weight Loss:			
	@ 200°C:	0.25	%
	@ 250°C:	0.56	%
	@ 300°C:	1.43	%
Suggested Operating Temperature:		< 275	°C (Intermittent)
Storage Modulus:		387,803	psi
* Particle Size:		N/A	

ELECTRICAL AND THERMAL PROPERTIES:					
Thermal Conductivity:	N/A				
Volume Resistivity @ 23°C:	$\geq 2 \times 10^{13}$	Ohm-cm			
Dielectric Constant (1KHz):	3.90				
Dissipation Factor (1KHz):	0.019				

OPTICAL PROPERTIES @ 23°C:		
Spectral Transmission:	> 96% @ 1500	nm
	> 98% @ 1000	nm
	> 97% @ 800	nm
Refractive Index:	N/A	



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EPO-TEK® OM125 Advantages & Suggested Application Notes:

- Color coded blue for easy operator ID on the manufacturing floor.
- A reliability test report is available when using MM fibers and MT ferrule connectors.
- It is compatible with Telcordia GR1221 and GR326.
- Versatility in curing from 23°C to 80°C. Contact <u>techserv@epotek.com</u> for best postcuring techniques.
- When used in optical beam pathway, a non-blue version is available. Contact techserv@epotek.com for your best recommendation.
- A low viscosity allows for wicking and capillary process methods. Can also be used for potting and encapsulation.