

Product Information Sheet

EPO-TEK® OE184

Date: September 2024 Recommended Cure: 150°C / 1 Hour

Rev: VI No. of Components: Two

Mix Ratio by Weight: 10:1

Specific Gravity: Part A: 1.20 Part B: 1.02
Pot Life: < 1 Hour

Shelf Life- Bulk: One year at room temperature

Minimum Alternative Cure(s):

May not achieve performance properties listed below

150°C / 1 Minute 120°C / 5 Minutes 100°C / 10 Minutes 80°C / 25 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.
- If product crystallizes in storage, place container in warm oven until crystallization disappears. Please refer to Tech Tip #7 on website.

Product Description: A two component, high Tg, optically clear epoxy for packaging and assembly of fiber optics cables and components. It is suggested for termination of fibers into ferrules, or fabrication of waveguide devices. It is a faster curing alternative to EPO-TEK® 353ND.

<u>Typical Properties:</u> 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: Clear/col	lorless Part B: Amber
* Consistency:	Pourable liquid	
* Viscosity (23°C) @ 100 rpm:	3,000 - 4,000	cPs
Thixotropic Index:	N/A	
* Glass Transition Temp:	≥ 100	°C (Dynamic Cure: 20-200°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)
Coefficient of Thermal Expansion (CTE)	:	
Below T	g: 36	x 10 ⁻⁶ in/in°C
Above T	j: 165	x 10 ⁻⁶ in/in°C
Shore D Hardness:	87	
Lap Shear @ 23°C:	1,644	psi
Die Shear @ 23°C:	≥ 10	Kg 3,556 psi
Degradation Temp:	474	°C
Weight Loss:		
@ 200°C	C: 0.07	%
@ 250°C	C: 0.14	%
@ 300°C	0.39	%
Suggested Operating Temperature:	< 350	°C (Intermittent)
Storage Modulus:	232,435	psi
* Particle Size:	N/A	

ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	N/A	
Volume Resistivity @ 23°C:	\geq 7x 10 ¹²	Ohm-cm
Dielectric Constant (1KHz):	3.45	
Dissipation Factor (1KHz):	0.007	

OPTICAL PROPERTIES @ 2	3°C:	
Spectral Transmission:	95% @ 1550	nm
	> 95% @ 700-1400	nm
Refractive Index (uncured):	1.5704 @ 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.