

EPO-TEK[®] OG175 Technical Data Sheet For Reference Only

UV Optical Cure Epoxy

Number of Components:	Single	Minimum Bond Line Cure Schedule*:
Mix Ratio By Weight:	N/A	100mW/cm ² for > 4 minutes @ 320-500 nm (depending on thickness)
Specific Gravity:	1.49	
Part A		
Part B		
Pot Life:	N/A	
Shelf Life:	One year at room temp	erature
Note: Container(s) should be kept closed in a dark location when not in use.		not in use. *Please see Applications Note(s) available on our website.

Product Description:

EPO-TEK[®] OG175 is single component, optically clear, low refraction (Nd), UV curable epoxy adhesive for fiber optic and opto-electronic device packaging.

EPO-TEK[®] OG175 Advantages & Application Notes:

- Low viscosity allows for adhesive, sealing, and encapsulation processes.
- Designed for Hg arc lamps, or UVB radiation curing.
 Contact techserv@epotek.com for recommendations on successful curing.
- Suggested Applications:
 - Opto-electronics
 - Adhesive for the optical beam pathway.
 - Low Nd adhesive or media for coupling light.
 - Adhesion to Si, ceramics, and most glasses.
 - Fiber Optics

- High transmission for 600 to 1700 nm range.
- Adhesive for coupling fiber array to lens array using V-grooves.
- It is a higher viscosity alternative to EPO-TEK[®]OG125.

<u>Typical Properties</u>: (To be used as a guide only, not as a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results; * denotes test on lot acceptance basis; Cure condition: varies as required

Physical Properties:			
*Color: Clear/Light Yellow	Die Shear Strength @ 23°C: ≥ 10 Kg / 3,400 psi		
*Consistency: Pourable liquid	Degradation Temp. (TGA): 410°C		
*Viscosity (@ 100 RPM/23°C): 1,300 – 2,300 cPs	Weight Loss:		
Thixotropic Index: N/A	@ 200°C: 0.45%		
*Glass Transition Temp.(Tg): ≥ 15°C (Dynamic Post- Cure	@ 250°C: 1.13%		
Scan 20—200°C; Ramp -10—200°C @ 20°C/Min)	@ 300°C: 2.06%		
Coefficient of Thermal Expansion (CTE):	Operating Temp:		
Below Tg: 56 x 10 ⁻⁶ in/in/°C	Continuous: - 55°C to 200°C		
Above Tg: 189 x 10 ⁻⁶ in/in/°C	Intermittent: - 55°C to 300°C		
Shore D Hardness: 55	Storage Modulus @ 23°C: 164,473 psi		
	Particle Size: N/A		
Optical Properties @ 23°C:			
Refractive Index @ 23°C (uncured): 1.4466 @ 589 nm	Spectral Transmission @ 23°C: >97% @ 600-1700 nm		
	- >94% @ 500 nm		
	>86% @ 400 nm		

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