

Number of Components:	Single	Minimum Bond Line Cure Schedule*:	
Mix Ratio By Weight:	N/A	100mW/cm ² for >2 minutes @ 320-500 nm (depending on thickness)	
Specific Gravity:	1.20		
Part A			
Part B			
Pot Life:	N/A		
Shelf Life:	One year at room temperature		

*Note: Container(s) should be kept closed in a dark location when not in use. *Please see Applications Note(s) available on our website.*

Product Description:

EPO-TEK[®] OG116-31 is a single component, UV curable epoxy adhesive and encapsulant, designed for PCB and circuit assembly applications found in semiconductor, computer, medical, and scientific/OEM industries.

EPO-TEK[®] OG116-31 Advantages & Application Notes:

- Viscosity/rheology adapted to high volume syringe needle dispensing with no tailing.
- Complies with USP Class VI biocompatibility standards.
- Versatility in cure. Product responds to a broad range of UV light, and secondary thermal post-curing.
- Suggested applications:
 - Semiconductor: COB glob top covering IC's and wire bonds; glob top dam; encapsulating and sealing; adhesion to FR4, Kapton, silicon.
 - Fiber Optic: making fiber optic pigtailed; active alignment of optics; adhesion to many types of glass, metals, ceramics and plastics.
 - Opto-electronic:
 - Perimeter/main seal for LCD's, compatible with VAN liquid crystal for LCoS devices.
 - Adhesive technology described in Technical Paper # 55; <http://www.epotek.com/ssc-white-papers.asp>
- High Tg and low outgassing are indicative of its high temperature performance.

Typical Properties: *(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:	
<p>*Color: Cloudy White</p> <p>*Consistency: Viscous liquid</p> <p>*Viscosity (@ 10 RPM/23°C): 20,000 – 30,000 cPs</p> <p>Thixotropic Index: 1.3</p> <p>*Glass Transition Temp.(Tg): ≥ 115°C (Dynamic Post- Cure Scan 20—200°C; Ramp -10—200°C @ 20°C/Min)</p> <p>Coefficient of Thermal Expansion (CTE): Below Tg: 41 x 10⁻⁶ in/in/°C Above Tg: 170 x 10⁻⁶ in/in/°C</p> <p>Shore D Hardness: 83</p>	<p>Die Shear Strength @ 23°C: ≥ 10 Kg / 3,400 psi</p> <p>Degradation Temp. (TGA): 409°C</p> <p>Weight Loss: @ 200°C: 0.31% @ 250°C: 0.68% @ 300°C: 1.18%</p> <p>Operating Temp: Continuous: - 55°C to 200°C Intermittent: - 55°C to 300°C</p> <p>Storage Modulus @ 23°C: 263,581 psi</p> <p>Particle Size: < 20</p>
Optical Properties @ 23°C:	
<p>Index of Refraction @ 23°C: 1.5662 @ 589 nm</p>	<p>Spectral Transmission @ 23°C: >96% @ 660-1640 nm >92% @ 500 nm</p>

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Zur Beachtung:

Vorstehende Angaben können nur allgemeine Hinweise sein. Bei den aufgeführten Eigenschaften und Leistungsmerkmalen handelt es sich um circa-Werte, diese sind nicht Teil der Produktspezifikation. Wegen der außerhalb unseres Einflusses liegenden Verarbeitungs- und Anwendungsbedingungen und der Vielzahl unterschiedlicher Materialien empfehlen wir, in jedem Fall zunächst ausreichende Eigenversuche durchzuführen. Eine Haftung für konkrete Anwendungsergebnisse kann daher aus den Angaben und Hinweisen in diesem Merkblatt nicht abgeleitet werden.

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Änderungen vorbehalten / Stand: 08/2007