



## Preliminary Product Information Sheet

*(Note: These are typical properties to be used as a guide only, not a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results.)*

|                                |   |
|--------------------------------|---|
| <b>MATERIAL ID:</b>            | <b>EPO-TEK® OG116</b>   |
| <b>Date:</b> 08/2008           | <b>Per:</b>   |
| <b>Rev:</b> 1                  |   |
| <b>Material Description:</b>   | A single component, UV cured, high viscosity adhesive for opto-electronic applications including fiber optic packaging, sensor device, SCI-OEM optics and general electronic assembly. Notable qualities include high Tg and index of refraction. |
| <b>Number of Components:</b>   | Single  |
| <b>Mix Ratio:</b>              | N/A   |
| <b>Cure Schedule (minimum)</b> | 100mW/cm <sup>2</sup> for 1-2 minutes @ 320-500 nm (depending on thickness)   |
| <b>Specific Gravity:</b>       | 1.20 --- Part A: Part B:  |
| <b>Pot Life:</b>               | N/A   |
| <b>Shelf Life:</b>             | 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.

### MATERIAL CHARACTERISTICS:

| <b>PHYSICAL PROPERTIES:</b>                    |                                |                                |                   |
|--|--------------------------------|--------------------------------|-------------------|
| <b>Color (before cure):</b>                    | Clear/Colorless                | <b>Die Shear @ 23°C:</b>       | 12.6 Kg           |
| <b>Consistency:</b>                            | Viscous liquid                 | <b>Degradation Temp:</b>       | 424 °C            |
| <b>Viscosity (23°C):</b>                       |                                | <b>Weight Loss:</b>            |                   |
| @ 2.5 rpm                                      | 88,979 cPs                     | @ 200°C:                       | 0.19 %            |
| <b>Thixotropic Index:</b>                      | N/A                            | @ 250°C:                       | 0.40 %            |
| <b>Glass Transition Temp:</b>                  | 146 °C                         | @ 300°C:                       | 0.68 %            |
| <b>Coefficient of Thermal Expansion (CTE):</b> |                                | <b>Operating Temp:</b>         |                   |
| Below Tg:                                      | 56 x 10 <sup>-6</sup> in/in°C  | Continuous:                    | - 55°C to + 200°C |
| Above Tg:                                      | 165 x 10 <sup>-6</sup> in/in°C | Intermittent:                  | - 55°C to + 300°C |
| <b>Shore D Hardness:</b>                       |                                | <b>Storage Modulus @ 23°C:</b> | 215,745 psi       |
| <b>Lap Shear @ 23°C:</b>                       | psi                            | <b>Particle Size:</b>          | N/A               |

| <b>ELECTRICAL AND THERMAL PROPERTIES:</b> |        |                                    |  |
|---|--------|------------------------------------|--|
| <b>Thermal Conductivity:</b>              | N/A    | <b>Dielectric Constant (1KHz):</b> |  |
| <b>Volume Resistivity @ 23°C:</b>         | Ohm-cm | <b>Dissipation Factor (1KHz):</b>  |  |

| <b>OPTICAL PROPERTIES @ 23°C:</b> |                                    |
|-----------------------------------|------------------------------------|
| <b>Spectral Transmission:</b>     | <b>Refractive Index (uncured):</b> |
| > 98 % @ 560-1660 nm              | 1.5756 @ 589 nm                    |
| 89 % @ 400 nm                     |                                    |

*The data above is INITIAL only - it may be changed at anytime, for any reason without notice to anyone. It is provided only as a guide for evaluation/consideration.*

\*These material characteristics are typical properties that are based on a limited number of samples/batches. All properties are based on the cure indicated above. Some properties may vary as manufactured quantities are scaled up to commercialized production levels.

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