

Product Information Sheet

MATERIAL ID: **EPO-TEK® OG159-2**

Date: Sep 2013

Rev: III

Material Description: A single component, high viscosity, UV curable epoxy adhesive designed for sealing glass plates together in the LCD/OLED/display industry. It contains 1mil glass beads for bond line control. Common applications include semiconductor, electro-optics, fiber optic, and scientific/OEM. It can be applied by screen printing or dispensing techniques. It is capable of coating, adhering, sealing, and encapsulating devices.

Number of Components: Single

Mix Ratio by Weight: N/A

Recommended Cure: 100mW/cm² @ 240-365 for > 2 minutes, depending on thickness
- under an F-type Mercury lamp

Specific Gravity: 1.18

Pot Life: N/A

Shelf Life: One year at room temperature

NOTE: Container(s) should be kept closed when not in use. Filled systems should be stirred thoroughly before mixing and prior to use.

Thermal post-cure beneficial - contact techserv@epotek.com for recommendations.

MATERIAL CHARACTERISTICS: To be used as a guide only, not as a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results; Cure condition: varies as required

* denotes test on lot acceptance basis

PHYSICAL PROPERTIES:

| | |
|--|---|
| * Color (before cure): | White |
| * Consistency | Thixotropic paste |
| * Viscosity (23°C): @ 2.5 rpm | 100,000-140,000 cPs |
| Thixotropic Index: | N/A |
| * Glass Transition Temp: | ≥ 30 °C (Post-Cure Dynamic Scan: 20-200°C; Ramp -10-200°C @ 20°C/Min) |
| Coefficient of Thermal Expansion (CTE): | |
| Below Tg: | 58 x 10 ⁻⁶ in/in°C |
| Above Tg: | 244 x 10 ⁻⁶ in/in°C |
| Shore D Hardness: | 69 |
| Lap Shear @ 23°C: | N/A |
| Die Shear @ 23°C: | ≥ 5 Kg 1,700 psi |
| Degradation Temp: | 443 °C |
| Weight Loss: | |
| @ 200°C | 0.13 % |
| @ 250°C | 1.44 % |
| @ 300°C | 0.97 % |
| Operating Temp: | |
| Continuous: | - 55°C to 200°C |
| Intermittent: | - 55°C to 300°C |
| Storage Modulus: | 341,084 psi |
| * Particle Size: | ≤ 30 microns |

OPTICAL PROPERTIES @ 23°C:

| | |
|------------------------------------|---------------------|
| Spectral Transmission: | ≥ 98% @ 580-2000 nm |
| Refractive Index (uncured): | 1.5684 @ 589 nm |
| Refractive Index (cured): | 1.5715 @ 589 nm |

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