

Product Information Sheet

MATERIAL ID: EPO-TEK® OG178

Date: Sep 2013 Rev: VII

Material Description: A single component, UV/visible shifted light curable epoxy, designed for adhesive, sealing, coating

and encapsulating applications found in semiconductor, electro-optics, fiber optics, medical, and

scientific/OEM industries. It is a low viscosity, all-purpose adhesive.

Number of Components: Single **Mix Ratio by Weight:** N/A

Recommended Cure: 100mW/cm² @ 240-365 for >3 minutes, depending on thickness - under an F-type Mercury lamp

-or- >5 minutes @ 395 nm -or- >10 minutes @ 455 nm

Specific Gravity: 1.15 **Pot Life:** N/A

Shelf Life: One year refrigerated

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

PHYSCIAL PROPERTIES:

* Color (before cure): Clear Orange
* Consistency Pourable liquid

* Viscosity (23°C):@ 100 rpm 300 - 600 cPs Thixotropic Index: N/A

* Glass Transition Temp: ≥ 50 °C (Post-Cure Dynamic Scan: 20-200°C; Ramp -10-200°C @ 20°C/Min)

Coefficient of Thermal Expansion (CTE):

Below Tg: 68 x 10⁻⁰ in/in°C Above Tg: 185 x 10⁻⁰ in/in°C

Shore D Hardness: 86

Die Shear @ 23°C: > 10 Kg 3,400 psi

Degradation Temp: 296 °C

Weight Loss:

@ **200°C** 2.45 % @ **250°C** 3.19 %

Operating Temp:

Continuous: - 55°C to 125°C Intermittent: - 55°C to 225°C Storage Modulus: 220,734 psi

* Particle Size: N/A

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission: > 99% @ 541-1660 nm

> 95% @ 380-520 **nm**

Refractive Index (uncured): 1.5250 @ 589 nm Refractive Index (cured): 1.5445 @ 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.