

## Product Information Sheet

### EPO-TEK<sup>®</sup> OG178

**Date:** June 2017  
**Material Description:**

**Rev:** IX  
 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  
**Specific Gravity:** 1.16  
**Pot Life:** N/A  
**Shelf Life:** One year refrigerated

Recommended Cure	
<b>Iron-Doped Mercury Flood Lamp</b> <i>100 mW/cm<sup>2</sup> @ 240-400 nm</i>	> 60 sec.
Alternative Cures*	
Iron-Doped Mercury Spot Lamp	> 10 min.
365nm LED Flood Lamp	> 7 min.
Pulsed Mercury Lamp	> 2 min.
<b>UV Cure is complete after 24 hours from UV Exposure</b>	
* Contact Technical Services for application-specific variations	

**NOTES:**

- Container(s) should be kept closed when not in use.
- Filled systems should be stirred thoroughly before mixing and prior to use.
- Performance properties (rheology, conductivity, others) of the Products may vary from those stated on the data sheet when bi-pak/syringe packaging or post-processing of any kind is performed. Epoxy's warranties shall not apply to any products that have been reprocessed or repackaged from Epoxy's delivered status/container into any other containers of any kind, including but not limited to syringes, bi-paks, cartridges, pouches, tubes, capsules, films or other packages..
- Thermal post-cure beneficial - contact [techserv@epotek.com](mailto:techserv@epotek.com) for recommendations.

**MATERIAL CHARACTERISTICS:** *Cure condition: Varies as required \*Testing on lot acceptance basis Data below is not guaranteed. To be used as a guide only, not as a specification. Different batches, conditions and applications yield differing results.*

**PHYSICAL PROPERTIES:**

<b>* Color (before cure):</b>	Clear orange	
<b>* Consistency:</b>	Pourable liquid	
<b>* Viscosity (23°C) @ 100 rpm:</b>	300 - 600 cPs	
<b>Thixotropic Index:</b>	N/A	
<b>* Glass Transition Temp:</b>	≥ 50 °C (Dynamic Cure:20-200°C/ISO 25 Min; Ramp -10-200°C @ 20°C/Min)	
<b>Coefficient of Thermal Expansion (CTE):</b>		
<b>Below Tg:</b>	68 x 10 <sup>-6</sup> in/in°C	
<b>Above Tg:</b>	185 x 10 <sup>-6</sup> in/in°C	
<b>Shore D Hardness:</b>	86	
<b>Die Shear @ 23°C:</b>	≥ 10 Kg	3,556 psi
<b>Degradation Temp:</b>	296 °C	
<b>Weight Loss:</b>		
<b>@ 200°C</b>	2.45 %	
<b>@ 250°C</b>	3.19 %	
<b>@ 300°C</b>	11.10 %	
<b>Suggested Operating Temperature:</b>	< 225 °C (Intermittent)	
<b>Storage Modulus:</b>	220,734 psi	
<b>* Particle Size:</b>	N/A	

**OPTICAL PROPERTIES @ 23°C:**

<b>Spectral Transmission:</b>	≥ 99% @ 540-1,660 nm	
	≥ 95% @ 380-540 nm	
<b>Refractive Index (uncured):</b>	1.5250 @ 589 nm	
<b>Refractive Index (cured):</b>	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.**