

## Product Information Sheet

**MATERIAL ID:**

**EPO-TEK® OG147-7**

**Date:** 08/2007

**Per:**

**Rev:** II

**Material Description:**

A single component, thixotropic, UV curable epoxy, designed for adhesive, sealing, and encapsulating applications found in semiconductor, electro-optics, fiber optics, medical, and scientific / OEM industries. It is a high viscosity epoxy ideal for COB glob top “dam” encapsulation processes.

**Number of Components:**

Single

**Mix Ratio by weight:**

N/A

**Cure Schedule (minimum)\***

100mW/cm<sup>2</sup> for > 3 minutes @ 320-500 nm (depending on thickness)

**Specific Gravity:**

1.07 --- 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.

**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.*

\* denotes test on lot acceptance basis; Cure condition: varies as required

### PHYSICAL PROPERTIES:

<b>*Color (before cure):</b>	Cloudy White	<b>Die Shear @ 23°C:</b>	≥ 20 Kg / 6,800 psi
<b>*Consistency:</b>	Smooth thixotropic paste	<b>Degradation Temp:</b>	414 °C
<b>*Viscosity (23°C):</b>		<b>Weight Loss:</b>	
@ 10 rpm	30,000 - 40,000 cPs	@ 200°C:	0.09 %
<b>Thixotropic Index:</b>	2.1	@ 250°C:	0.29 %
<b>*Glass Transition</b>	≥ 70 °C (Post-Cure)	@ 300°C:	0.80 %
Dynamic Scan 20—200°C; Ramp -10—200°C @ 20°C/Min)		<b>Operating Temp:</b>	
<b>Coefficient of Thermal Expansion (CTE):</b>		<b>Continuous:</b>	- 55°C to + 200°C
<b>Below Tg:</b>	45 x 10 <sup>-6</sup> in/in°C	<b>Intermittent:</b>	- 55°C to + 300°C
<b>Above Tg:</b>	190 x 10 <sup>-6</sup> in/in°C	<b>Storage Modulus @ 23°C:</b>	269,396 psi
<b>Shore D Hardness:</b>	81	<b>*Particle Size:</b>	≤ 20 microns

### OPTICAL PROPERTIES @ 23°C:

<b>Spectral Transmission:</b>	>83 % @ 800-2000 nm	<b>Index of Refraction:</b>	1.5690 @ 589 nm
	>78 % @ 580-800 nm		
	>56 % @ 400-580 nm		