

Product Information Sheet

MATERIAL ID: **EPO-TEK® OG133-8** (formerly 90-36-4)

Date: Sep 2013

Rev: IV

Material Description: A single component, UV curable, thixotropic flexible epoxy adhesive/encapsulant designed for semiconductor and opto-electronic packaging. Glob top over IC and wire bonds, and low stress bonding of fiber optic components, are common applications. It is a replacement for EPO-TEK® OG133-5, and a non-flow version of EPO-TEK® OG133-7.

Number of Components: Single

Mix Ratio by Weight: N/A

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

Specific Gravity: 1.13

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.

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):	Cloudy/Colorless
* Consistency	Slightly thixotropic paste
* Viscosity (23°C): @ 100 rpm	1,000 - 1,500 cPs
Thixotropic Index:	3.1
* Glass Transition Temp:	≤ 10 °C (Post-Cure Dynamic Scan: 20-200°C; Ramp -10-200°C @ 20°C/Min)
Coefficient of Thermal Expansion (CTE):	
Below Tg:	43 x 10 ⁻⁹ in/in°C
Above Tg:	222 x 10 ⁻⁹ in/in°C
Shore A Hardness:	65
Die Shear @ 23°C:	3.2 Kg
Degradation Temp:	353 °C
Weight Loss:	
@ 200°C	2.37 %
@ 250°C	3.64 %
@ 300°C	5.72 %
Operating Temp:	
Continuous:	- 55°C to 150°C
Intermittent:	- 55°C to 250°C
Storage Modulus:	< 1,000 psi
* Particle Size:	≤ 10 microns

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	≥ 95% @ 900 nm
	≥ 90% @ 640 nm
Refractive Index (uncured):	1.5041 @ 589 nm
Refractive Index (cured):	1.5244 @ 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.