

Preliminary Product Information Sheet

(Note: These are typical properties to be used as a guide only, not a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results.)

MATERIAL ID: EPO-TEK® OG198-54 (formerly 90-127-3)

Date: 8/2009

Rev: IV

Material Description: Single component, low viscosity, high Tg, UV curable epoxy. Active alignment of optics, securing fibers into V-grooves and fiber pigtailed are a few of its common applications. It can also be used for medical, hybrid and semiconductor device assembly. It is a "dual" cure chemistry. Replacement version of EPO-TEK® OG198-50.

Number of Components: Single

Mix Ratio by Weight: N/A

Cure Schedule (minimum): 100mW/cm² for >2 minutes @ 320-500 nm (depending on thickness) + 150°C/1 hour oven cure

Specific Gravity: 1.12

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.

MATERIAL CHARACTERISTICS:

PHYSICAL PROPERTIES:

Color (before cure):	Clear/Colorless
Consistency	Pourable liquid
Viscosity (23°C): @ 100 rpm	327 cPs
Glass Transition Temp:	131 °C
Coefficient of Thermal Expansion (CTE):	
Below Tg:	70 x 10 ⁻⁶ in/in°C
Above Tg:	200 x 10 ⁻⁶ in/in°C
Shore D Hardness:	86
Die Shear @ 23°C:	11.2 Kg
Degradation Temp:	363 °C
Weight Loss:	
@ 200°C	0.24 %
@ 250°C	1.03 %
@ 300°C	1.84 %
Operating Temp:	
Continuous:	- 55°C to 200 °C
Intermittent:	- 55°C to 300 °C
Storage Modulus:	204,500 psi

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	> 97% @ 460-1680 nm
Index of Refraction:	1.5062 @ 589 nm

The data above is INITIAL only - it may be changed at anytime, for any reason without notice to anyone. It is provided only as a guide for evaluation/consideration.

*These material characteristics are typical properties that are based on a limited number of samples/batches. All properties are based on the cure indicated above. Some properties may vary as manufactured quantities are scaled up to commercialized production levels.