

## **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® OG142-95 (formerly 90-95-1)

Date: Sep 2013 Rev: IV

Material Description: Single component, low viscosity, UV curable epoxy for adhesive sealing and encapsulating fiber

optic and optoelectronic packaging application. Replacement version of EPO-TEK® OG142-17

with better bonding strength and moisture resistance.

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

**Recommended Cure:**  $100 \text{mW/cm}^2$  @ 240-365nm for > 2 minutes, depending on thickness

- under an F-type Mercury lamp

**Specific Gravity:** 1.17 **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 **techsery@epotek.com** for recommendations.

## **MATERIAL CHARACTERISTICS:**

PHYSCIAL	PROPERTIES:

Color (before cure): Clear/Colorless
Consistency Pourable liquid

Viscosity (23°C): @ 100 rpm 534 cPs Glass Transition Temp: N/A

**Coefficient of Thermal Expansion (CTE):** 

Below Tg: 50 x 10<sup>-6</sup> in/in°C Above Tg: 162 x 10<sup>-6</sup> in/in°C

Shore D Hardness: 82
Die Shear @ 23°C: 15.2 Kg
Degradation Temp: 358 °C

**Weight Loss:** 

@ 200°C 0.39 % @ 250°C 1.18 % @ 300°C 3.09 %

**Operating Temp:** 

Continuous: - 55°C to 200°C
Intermittent: - 55°C to 300°C
Storage Modulus: 520,650 psi

## **OPTICAL PROPERTIES @ 23°C:**

Spectral Transmission: $\geq 97\%$  @ 580 - 1680 nmRefractive Index (uncured):1.4924 @ 589 nmRefractive Index (cured):1.5123 @ 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.