# Product Information Sheet

## EPO-TEK® OG198-55-1

**Date:** September 2017 **Rev:** III

**Material Description:** EPO-TEK® OG198-55-1 is a single component, high thixotropy cloudy UV cure epoxy which is electrically and thermally insulating. It is a thixotropic version of EPO-TEK® OG198-54.

**Number of Components:** Single
**Mix Ratio by Weight:** N/A
**Specific Gravity:** 1.15
**Pot Life:** N/A
**Shelf Life:** One year refrigerated

| Recommended Cure | |
|---|---|
| **Iron-Doped Mercury Flood Lamp** *100 mW/cm² @ 240-365 nm* | **> 30 sec.** |
| **Alternative Cures*** | |
| Iron-Doped Mercury Spot Lamp | > 30 sec. |
| 365nm LED Flood Lamp | > 30 sec. |
| Pulsed Mercury Lamp | > 30 sec. |
| **UV Cure is complete after 24 hours from UV Exposure** | |
| * 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 product 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
- Thermal post-cure beneficial - contact **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: | | | | | |
|---|---|---|---|---|---|
| * **Color (before cure):** | | Cloudy | | | |
| * **Consistency:** | | Smooth thixotropic paste | | | |
| * **Viscosity (23°C) @ 100 rpm:** | | 1,200 - 2,000 | cPs | | |
| **Thixotropic Index:** | | 5.6 | | | |
| * **Glass Transition Temp:** | | ≥ 120 | °C (Dynamic Cure:20-200°C/ISO 25 Min; Ramp -10-200°C @ 20°C/Min) | | |
| **Coefficient of Thermal Expansion (CTE):** | | | | | |
| | **Below Tg:** | 72 | x $10^{-6}$ in/in°C | | |
| | **Above Tg:** | 120 | x $10^{-6}$ in/in°C | | |
| **Shore D Hardness:** | | 85 | | | |
| **Die Shear @ 23°C:** | | | | | |
| **UV Cure:** | | ≥ 20 | Kg | 7,112 | psi |
| **UV Cure + 23°C/24 Hours:** | | 27.7 | Kg | 9,850.1 | psi |
| **UV Cure + 80°C/1 Hour:** | | 27.2 | Kg | 9,672.3 | psi |
| **Degradation Temp:** | | 354 | °C | | |
| **Weight Loss:** | **@ 200°C** | 0.23 | **%** | | |
| | **@ 250°C** | 0.73 | **%** | | |
| | **@ 300°C** | 2.13 | **%** | | |
| **Suggested Operating Temperature:** | | < 300 | °C (Intermittent) | | |
| **Storage Modulus:** | | 489,872 | psi | | |
| * **Particle Size:** | | ≤ 20 | microns | | |

| OPTICAL PROPERTIES @ 23°C: | | |
|---|---|---|
| **Spectral Transmission:** | ≥ 97% @ 560-1,680 | nm |
| **Refractive Index (uncured):** | 1.5023 @ 589 | nm |



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