

# EPO-TEK® OG653

Epoxy; Epoxide

Epoxy Technology Inc.

## Message:

UV curable adhesive designed for glob top encapsulation

| General Information                       |                      |          |
|-------------------------------------------|----------------------|----------|
| Features                                  | UV Curable           |          |
| Uses                                      | Adhesives            |          |
| Agency Ratings                            | EC 1907/2006 (REACH) |          |
|                                           | EU 2003/11/EC        |          |
|                                           | EU 2006/122/EC       |          |
| RoHS Compliance                           | RoHS Compliant       |          |
| Forms                                     | Liquid               |          |
| Processing Method                         | Encapsulating        |          |
| Thermal                                   | Nominal Value        | Unit     |
| Glass Transition Temperature <sup>1</sup> | > 40.0               | °C       |
| CLTE - Flow                               |                      |          |
| -- <sup>2</sup>                           | 7.5E-5               | cm/cm/°C |
| -- <sup>3</sup>                           | 1.6E-4               | cm/cm/°C |
| Optical                                   | Nominal Value        | Unit     |
| Refractive Index                          |                      |          |
| -- <sup>4</sup>                           | 1.487                |          |
| -- <sup>5</sup>                           | 1.511                |          |
| Transmittance                             |                      |          |
| 320 nm                                    | 33.0                 | %        |
| 380 nm                                    | 83.0                 | %        |
| 440 to 2220 nm                            | > 97.0               | %        |
| Thermoset                                 | Nominal Value        | Unit     |
| Shelf Life (23°C)                         | 52                   | wk       |
| Additional Information                    | Nominal Value        | Unit     |
| Degradation Temperature                   | 310                  | °C       |
| Operating Temperature                     |                      |          |
| Continuous                                | -55 to 150           | °C       |
| Intermittent                              | -55 to 250           | °C       |
| Storage Modulus                           | 2.39                 | GPa      |
| Weight Loss on Heating                    |                      |          |
| 200°C                                     | 2.0                  | %        |
| 250°C                                     | 3.4                  | %        |

| Uncured Properties            | Nominal Value                                                  | Unit              |
|-------------------------------|----------------------------------------------------------------|-------------------|
| Color                         | Green                                                          |                   |
| Density                       | 1.10                                                           | g/cm <sup>3</sup> |
| Viscosity <sup>6</sup> (23°C) | 0.65 to 0.85                                                   | Pa·s              |
| Cured Properties              | Nominal Value                                                  | Unit              |
| Shore Hardness (Shore D)      | 76                                                             |                   |
| Lap Shear Strength (23°C)     | 9.21                                                           | MPa               |
| NOTE                          |                                                                |                   |
| 1.                            | Dynamic Cure 20-200°C/ISO 25<br>Min; Ramp -10-200°C @ 20°C/Min |                   |
| 2.                            | Below Tg                                                       |                   |
| 3.                            | Above Tg                                                       |                   |
| 4.                            | 589 nm (uncured)                                               |                   |
| 5.                            | 589 nm (cured)                                                 |                   |
| 6.                            | 100 rpm                                                        |                   |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

