

EPO-TEK® 920-FL

Epoxy; Epoxide
Epoxy Technology Inc.

Message:
EPO-TEK® 920-FL is a two component, high Tg, electrically insulating, thermally conductive epoxy designed for thermal management applications found in semiconductor, hybrid microelectronics, PCB, and optical industries. It is a low viscosity version of EPO-TEK® 920.

| General Information | | | |
|------------------------------------|------------------------------------|------|-----|
| Features | Electrically Insulating | | |
| | Good Adhesion | | |
| | Low Viscosity | | |
| | Thermally Conductive | | |
| Uses | Adhesives | | |
| | Electrical/Electronic Applications | | |
| | Optical Applications | | |
| | Printed Circuit Boards | | |
| | Seals | | |
| Agency Ratings | EC 1907/2006 (REACH) | | |
| | EU 2003/11/EC | | |
| | EU 2006/122/EC | | |
| RoHS Compliance | RoHS Compliant | | |
| Forms | Paste | | |
| Processing Method | Casting | | |
| | Potting | | |
| Physical | Nominal Value | Unit | |
| Particle Size | < 50.0 | µm | |
| Degradation Temperature | 362 | °C | TGA |
| Die Shear Strength - >20 kg (23°C) | 46.9 | MPa | |
| Operating Temperature | | | |
| Continuous | -55 to 200 | °C | |
| Intermittent | -55 to 300 | °C | |
| Storage Modulus (23°C) | 5.40 | GPa | |
| Thixotropic Index | 3.10 | | |
| Weight Loss on Heating | | | |
| 200°C | 0.20 | % | |
| 250°C | 0.28 | % | |

| 300°C | 0.48 | % | |
|---|--|-------------------|-------------|
| Thermal | Nominal Value | Unit | |
| Glass Transition Temperature ¹ | > 90.0 | °C | |
| CLTE - Flow | | | |
| -- ² | 2.1E-5 | cm/cm/°C | |
| -- ³ | 9.7E-5 | cm/cm/°C | |
| Thermal Conductivity | 0.89 | W/m/K | |
| Thermoset | Nominal Value | Unit | Test Method |
| Thermoset Components | | | |
| Part A | Mix Ratio by Weight: 100 | | |
| Part B | Mix Ratio by Weight: 3.0 | | |
| Shelf Life (23°C) | 52 | wk | |
| Uncured Properties | Nominal Value | Unit | Test Method |
| Color | | | |
| -- ⁴ | Amber | | |
| -- ⁵ | Grey | | |
| Density | | | |
| Part B | 1.02 | g/cm ³ | |
| Part A | 2.51 | g/cm ³ | |
| Viscosity ⁶ (23°C) | 8.0 to 12 | Pa · s | |
| Curing Time (150°C) | 1.0 | hr | |
| Pot Life | 420 | min | |
| Cured Properties | Nominal Value | Unit | Test Method |
| Shore Hardness (Shore D) | 93 | | |
| Lap Shear Strength (23°C) | > 13.8 | MPa | |
| Relative Permittivity (1 kHz) | 5.96 | | |
| Volume Resistivity (23°C) | > 4.0E+13 | ohms · cm | |
| Dissipation Factor (1 kHz) | 9.0E-3 | | |
| NOTE | | | |
| 1. | Dynamic Cure 20-200°C/ISO 25 Min; Ramp -40-200°C @ 20°C/Min | | |
| 2. | Below Tg | | |
| 3. | Above Tg | | |
| 4. | Part B | | |
| 5. | Part A | | |
| 6. | 20 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

