

Potting Compound for Electronic Components

EPOXONIC® 59 is a filled one-component material (frozen product) based on epoxy resin.

EPOXONIC® 59 was developed for the potting of electronic components used in automotive applications (e.g. sensors). Its properties are stable up to 150°C and withstand temperature cycling. This material is easy to process at room temperature under vacuum.

Main Characteristics

- good adhesion to various materials
- thermal shock resistivity
- good processing properties
- long pot life at room temperature
- viscosity reduced by heating up to 60°C

Properties

- | | | |
|--|---------------------------------|---------------|
| • Colour | black | |
| • Coefficient of thermal expansion | | |
| α_1 (50 - 100°C) | 58 ± 2 [10 ⁻⁶ /K] | (Mettler TMA) |
| α_2 (130 - 210°C) | 125 ± 2 [10 ⁻⁶ /K] | (Mettler TMA) |
| • Glass transition temperature (T _g) | 122 ± 2°C | (Mettler DSC) |
| • Filler content | 48 % | |
| • Density | approx. 1.6 gms/cm ³ | |
| • Shore Hardness | D 90 | |

Processing

- Processing temperature 25 - 80°C
- Viscosity at 25°C 23,000 - 25,000 mPas
at 60°C 650 - 950 mPas
at 80°C 160 - 200 mPas
- Substrate temperature 25 - 80°C
- Method of application needle dispenser: needle inside \varnothing 0.58
or 0.84 mm at 1 - 2 bar pressure
- Pot life at room temperature
(time for viscosity to double) 48 hours
- Recommended cure schedule \geq 130 °C curing temperature
e. g. 150 °C / 2 h

Packaging

EPOXONIC® 59 is available as frozen product in 30 ml or 50 ml plastic syringes. Other packaging forms are available upon request.

Quality Assurance

If required, **EPOXONIC® 59** will be supplied with a Certificate of Analysis.

Storage

EPOXONIC® 59 can be stored in sealed syringes at +4 °C (refrigerator) approximately one week. The shelf life at -30 °C is approximately one year.

Health and Safety

As with all epoxy materials, this product may cause skin irritation. Recommended industrial hygiene procedures should always be followed when handling this product. Avoid skin contact. If contact does occur wash area immediately with soap and water. Please refer to Material Safety Data Sheet for details.

Disclaimer

All information contained herein is based on the present state of knowledge and believed to be reliable. Any suggestions or recommendations are made without liability on our part since we shall have no control over the use of our product. Buyers and users should make their own assessment of this product under their own conditions and for their own requirements.