

EPOXONIC® 273

**Flame-resistant potting compound for
Automotive Engineering, Microelectronics
and Electrical Engineering**

EPOXONIC® 273 is a solvent-free, mineral filled
2-part potting compound based on epoxy resin.

Main characteristics:

Heat resistance to 150 °C
Thermal shock resistance
High elongation at break
High thermal conductivity
Flame-resistance

Application:

EPOXONIC® 273 is especially suited for low stress potting of pressure and vibration sensitive electronic devices with demands on flame-resistance (e.g. sensors).

Properties:

Specific values measured by standard test specimen at 23 °C, cured 2 h / 120 °C.

Operating temperature	-40 °C to +150 °C	
Colour	beige	
Shore hardness	46 Shore D	DIN EN ISO 868
Density	1.7 g/cm ³	DIN EN ISO 1183-1
Coefficient of linear thermal expansion CTE (TMA)	115 – 125 x 10 ⁻⁶ /K (50 – 100 °C)	ISO 11359-2
Glass transition temperature (DSC)	-30 to -20 °C	DIN 53765
Flame-resistance	V0 (not listed)	UL 94
Water absorption	0.4 % at 100 °C / 30 h 2.1 % at 85 °C / 100 % rF (Saturation value)	DIN EN ISO 62
Thermal conductivity	approx. 1.0 W/mK	DIN EN ISO 8894-1

Additional Properties:

Tensile strength	4 MPa	DIN EN ISO 527
Elongation at break	30 %	DIN EN ISO 527
E-modulus	60 MPa	DIN EN ISO 527
Flexural strength at 3.5 % strain	6 MPa	DIN EN ISO 178
Flexural modulus	230 MPa	DIN EN ISO 178

Processing:

Mix ratio	Part A : Part B = 100 : 130 parts by weight	
Viscosity cone/plate viscometer		
	25 °C	30,000 – 35,000 mPas (Part A)
	25 °C	20,000 – 30,000 mPas (Part B)
	25 °C	25,000 – 30,000 mPas (Mixture A + B)
Pot life	25 °C	> 20 h (time to double viscosity)
	60 °C	1 h (time to double viscosity)
Method of application	e.g. dispenser	
Cure schedule	e.g. 2 h / 120 °C or 8 h / 100 °C Optimum cure schedules have to be determined by the specific application.	

Storage:

The shelf life of EPOXONIC® 273 part A and part B is 6 months at temperatures < 25 °C when stored in tightly closed, original containers. Part A and part B have to be stirred very well before use. Partly emptied containers should be tightly closed immediately after use.

Packaging:

EPOXONIC® 273 part A and part B is delivered in metal pails containing. Other packaging options are available upon request.

Health and Safety:

Recommended industrial hygiene procedures should always be followed when handling this product. Please refer to the corresponding Material Safety Data Sheet for details.

Quality Assurance:

If required EPOXONIC® 273 will be supplied with a Certificate of Analysis.

Disclaimer:

All information 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.