

EPOXONIC® 342

Low viscosity, heat conductive
potting compound for
demanding industrial applications

EPOXONIC® 342 is a solvent-free, 2-part potting compound based on epoxy resin.

Main characteristics:

- Long pot life
- Low viscosity
- Excellent crack resistance
- Moderate curing temperature

Application:

EPOXONIC® 342 is especially suited for potting of large electrical devices with high requirements for crack resistance at lower temperatures.

Properties:

Specific values measured by standard test specimen at 23 °C, cured 6 h / 60 °C and 4 h / 80 °C.

Operating temperature	-40 °C to +150 °C depending on the application, other limits may be more reasonable	
Colour	grey	
Shore hardness	90 Shore D	DIN EN ISO 868
Density	1.5 g/cm ³	DIN EN ISO 1183-1
Coefficient of linear thermal expansion CTE	40 – 45 x 10 ⁻⁶ /K (40 – 60 °C)	ISO 11359-2
Glass transition temperature (DSC / TMA)	65 – 75 °C	DIN 53765/ ISO 11359-2
Water absorption	0.04 % at 25 °C / 24 h	DIN EN ISO 62
Thermal conductivity	0.5 W/mK	DIN EN ISO 8894-1

Additional Properties:

Tensile strength	85 - 95 MPa	DIN EN ISO 527
Elongation at break	1.6 – 1.8 %	DIN EN ISO 527
E-modulus	9,000 – 10,500 MPa	DIN EN ISO 527
Flexural strength	134 - 138 MPa	DIN EN ISO 178
Flexural modulus	8,200 – 8,800 MPa	DIN EN ISO 178

Processing:

Mix ratio	Part A : Part B = 100 : 14.4 parts by weight	
Viscosity cone/plate viscometer	25 °C	50,000 – 70,000 mPas (Part A)
	25 °C	20 – 50 mPas (Part B)
	25 °C	1,500 – 2,500 mPas (Part A + B)
	60 °C	200 – 400 mPas (Part A + B)
	80 °C	100 – 300 mPas (Part A + B)
Pot life	25 °C	> 5 h (time to double viscosity, 100g batch)
Method of application	e.g. dispenser	
Cure schedule	e.g. 6 h / 60 °C + 4 h / 80 °C Optimum cure schedules have to be determined by the specific application.	

Storage:

The shelf life of EPOXONIC® 342 Part A and Part B is 12 months at temperatures at 15 – 25 °C when stored in tightly closed, original containers.

Part A has to be stirred very well before use and may crystallize after longer periods of time resp. storage at lower temperatures or high temperature changes. If crystallization occurs, this can be removed by heating up to 50 – 60 °C and stirring.

Partly emptied containers should be tightly closed immediately after use.

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.

Packaging:

EPOXONIC® 342 Part A is delivered in hobbocks.
Part B is delivered in metal cans. Other packaging
options are available upon request.

Quality Assurance:

If required EPOXONIC® 342 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.