

EPOXONIC® 235

**Flame-resistant, self-leveling
potting compound
for Microelectronics**

EPOXONIC® 235 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 glass transition temperature
Low thermal expansion
Flame-resistance
Chemical resistance
Low viscosity

Application:

EPOXONIC® 235 is especially suited for potting of electrical devices, which have to pass lead-free soldering processes (e.g. relays).

Properties:

Specific values measured by standard test specimen at 23 °C, cured 2 h / 60 °C + 2 h / 110 °C.

Operating temperature ¹⁾	-40 °C to +150 °C	
Colour	black	
Shore hardness	90 Shore D	DIN EN ISO 868
Density	1.7 g/cm ³	DIN EN ISO 1183-1
Coefficient of linear thermal expansion CTE	40 – 50 x 10 ⁻⁶ /K (50 – 100 °C)	ISO 11359-2
Glass transition temperature	130 – 140 °C	ISO 11359-2
Flame-resistance	HB (not listed)	UL 94
Tensile strength	50 MPa	DIN EN ISO 527
Elongation at break	1.1 %	DIN EN ISO 527
E-modulus	5,200 MPa	DIN EN ISO 527

Additional Properties:

Flexural strength	115 MPa	DIN EN ISO 178
Outer fibre strain at break	0.6 %	DIN EN ISO 178

1) Depending on the application, other temperature limits may be reasonable

Processing:

Mix ratio	Part A : Part B = 100 : 4.2 parts by weight	
Viscosity cone/plate viscometer	25 °C	6,500 – 10,500 mPas (Part A)
	25 °C	20 – 50 mPas (Part B)
	25 °C	4,000 – 6,000 mPas (Mixture A + B)
Pot life	40 °C	approx. 30 min (time to double viscosity)
Method of application	e.g. dispenser	
Cure schedule	e.g. 2 h / 60 °C + 2 h / 110 °C Optimum cure schedules have to be determined by the specific application.	

Storage:

The shelf life of EPOXONIC® 235 Part A and Part B is 12 months at temperatures < 25 °C when stored in tightly closed, original containers. The contents of the containers should be thoroughly stirred before use.

Part B can crystallize. In this case the whole container has to be completely heated to 50 °C – 60 °C and the content liquefied and homogenised.

EPOXONIC® 235 Part A may crystallize after longer periods of time resp. storage at lower temperatures or multiple temperature changes. If crystallization occurs, it can be removed by heating up to 50 °C – 60 °C and stirring.

Partly emptied containers should be tightly closed immediately after use.

Packaging:

EPOXONIC® 235 Part A is delivered in 20 l metal cans containing 20 kg material.

EPOXONIC® 235 Part B is delivered in 10 l metal cans containing 10 kg material.

Other packaging options are available upon request.

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.

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® 235 will be supplied with a Certificate of Analysis.