

# EPOXONIC® 283

**Toughened, room temperature curing  
potting compound for Microelectronics  
and Electrical Engineering**

EPOXONIC® 283 is a solvent-free, mineral filled 2-part potting compound based on epoxy resin.

## Main characteristics:

Heat resistance to 100 °C
Thermal shock resistance
Chemical resistance
Low viscosity
Excellent Toughness
Room temperature curing

## Application:

EPOXONIC® 283 is especially suited for potting of temperature sensitive electronic devices with high demands on mechanical properties (e.g. Automotive Electronics) as well as high-voltage devices (e.g. high-voltage plugs).

## Properties:

Specific values measured by standard test specimen at 23 °C, cured 1 h / 70 °C.

Operating temperature	-40 °C to +100 °C	
Colour	black	
Shore hardness	92 Shore D	DIN EN ISO 868
Density	1.7 g/cm <sup>3</sup>	DIN EN ISO 1183-1
Glass transition temperature (TMA)	95 – 105 °C	ISO 11359-2
Coefficient of linear thermal expansion CTE (TMA)	40 – 50 x 10 <sup>-6</sup> /K (20 – 80 °C)	ISO 11359-2
Tensile strength	72 MPa	DIN EN ISO 527
E-modulus	8,440 MPa	DIN EN ISO 527
Elongation at break	1.2 %	DIN EN ISO 527
Dielectric strength		DIN EN 60243-2
	60 °C	40 kV/mm

## Processing:

Mix ratio	Part A : Part B = 100 : 9.5 parts by weight	
Mixing temperature	20 – 30 °C	
Viscosity cone/plate viscometer	25 °C	40,000 – 50,000 mPas (Part A)
	25 °C	10 – 30 mPas (Part B)
	25 °C	2,000 – 3,000 mPas (Mixture A + B)
Pot life	25 °C	approx. 30 min (time to double viscosity)
Method of application	e.g. dispenser	
Cure schedule	e.g. > 36 h / 23 °C or 2 h / 50 °C or 1 h / 70 °C Optimum cure schedules have to be determined by the specific application.	

## Storage:

The shelf life of EPOXONIC® 283 Part A and part B is 12 months at temperatures < 25 °C when stored in tightly closed, original containers. Part A has to be stirred very well before use.

Partly emptied containers should be tightly closed immediately after use.

## Packaging:

EPOXONIC® 283 Part A is delivered in 30 l hobbocks containing 25 kg material. The Part B is delivered in 10 l 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® 283 will be supplied with a Certificate of Analysis.