

## Biresin® G46 PUR- and Backfill-Casting resin, filled

### Areas of Application

- Manufacture of master and core models, negatives and foundry patterns
- For control mouldings and copy models

### Product Benefits

- Low odour
- Good flowability and good degassing
- Casting of thick sections possible and true-to-size curing
- Long potlife and low reaction temperature
- Increasing of good mechanical properties after post curing 4 - 8 h at 70 °C resp. while heat influence at working
- Cured mouldings mechanically workable

### Description

- Basis Two component PUR system
- Component A **Biresin® G46**, polyol, beige, filled
- Component B **Biresin® G46**, MDI-based isocyanate, brown-transparent, unfilled

Processing Data		Component A	Component B
Individual components		<b>Biresin® G46</b>	<b>Biresin® G46</b>
Viscosity, 25°C	mPa.s	~ 20,000	~ 200
Density	g/ml	1.8	1.22
Mixing ratio A : B	in parts by weight	100	25
		Mixture	
Mixed viscosity, 25°C	mPa.s	~ 3,000	
Potlife, 200 g, RT	min	40	
Demoulding time, RT	h	16 - 24	

### Physical Data (approx. values)

Biresin® G46 (A)		with component B	Biresin® G46
Density	ISO 1183	g/cm³	1.7
Shore hardness	ISO 868	-	D 87
E-Modulus	ISO 178	MPa	6,500
Flexural strength	ISO 178	MPa	65
Tensile strength	ISO 527	MPa	25
Elongation at break	ISO 527	%	2.0
Compressive strength	ISO 604	MPa	110
Impact resistance	ISO 179	kJ/m²	6
Heat distortion temperature	ISO 75B	°C	80
Linear shrinkage	internal	%	0.03 - 0.05

### Packaging

Individual components	<b>Biresin® G46 (A)</b> <b>Biresin® G46 (B)</b>	20 kg; 10 kg net 2.5 kg net
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## Processing

- The material, processing and mould temperature must be from 18 to 25°C.
- The A component must be mixed thoroughly before use.
- Take care that both components are mixed thoroughly without air entrapment.
- Pay attention to dry conditions and dry mould surfaces while processing.
- Porous surfaces (wood) have to be well sealed before.
- The resin and hardener components are to be mixed thoroughly and poured immediately into previously released moulds (e.g. with Sika® Liquid Wax-815 resp. Sika® Pasty Wax-818; for more information see product data sheet).
- For cleaning of cured mouldings from wax residues we recommend Sika® Reinigungsmittel 5. Before application of other cleaners test their compatibility with resin.

## Storage

- Minimum shelf life is 12 month under room condition (18 - 25°C), when stored in original un-opened containers.
- After prolonged storage at low temperature, crystallisation of components may occur. This is easily removed by warming up for a sufficient time to a maximum of 70°C. Allow to cool to room temperature before use.
- Containers must be closed tightly immediately after use to prevent moisture ingress. The residual material needs to be used up as soon as possible.

## Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety related data.

## Disposal considerations

Product Recommendations: Must be disposed of in a special waste disposal unit in accordance with the corresponding regulations.

Packaging Recommendations: Completely emptied packagings can be given for recycling. Packaging that cannot be cleaned should be disposed of as product waste.

## Value Bases

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## Legal Notice

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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