

# 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-tosize 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
 Resin Biresin® G46, polyol, beige, filled

■ Hardener Biresin® G46, MDI-based isocyanate, brown-transparent, unfilled

Processing Data		Resin	Hardener
Individual components		Biresin® G46	Biresin® G46
Viscosity, 25°C	mPas	approx. 20.000	approx. 200
Density	g/ml	1.8	1.22
Mixing ratio resin to hardener	in parts by weight	100	25
		Mixt	ure
Mixed viscosity, 25°C	mPas	approx. 3.000	
Potlife, 200 g, RT	min	40	
Demoulding time, RT	h	16 - 24	

Physical Data (approxvalues	s)		
Biresin® G46 resin	with	h hardener	Biresin <sup>®</sup> 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
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

Biresin® G46 resin

20 kg; 10 kg net

Biresin® G46 hardener

2.5 kg net



#### **Processing**

- The material temperature must be 18 25°C.
- The resin component must be mixed thoroughly before use.
- Take care that resin and hardener is mixed thoroughly without air entrappment.
- Pay attention to dry conditions and dry mould surfaces while processing.
- Porous surfaces (wood) have to be well sealed before.
- The resin mix can be poured, beginning at the lowest point into previously released moulds (e. g. with Sika® Trennmittel 810, 815 Quick resp. Sika® Trennwachs 818, for more information see Technical 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 and storage of products, users should refer to the current Safety Data Sheet 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**

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