

Biresin® G46 AL Heat-resistant Casting resin, filled

Areas of Application

- Manufacture of smaller heat resistant moulds, e. g. vacuumforming moulds
- Manufacture of other moulds, models and negatives

Product Benefits

- Low odour
- Good flowability and good degassing
- Casting of thick sections possible
- Long potlife and low reaction temperature
- Good mechanical properties, at elevated temperatures too
- Increasing of good mechanical properties after post curing 4 - 8 h at 80 °C resp. while heat influence at working
- Cured mouldings mechanically workable

Description

- Basis Two-component-PUR-system
- Resin **Biresin® G46 AL**, polyol, Aluminium-grey, filled,
- Hardener **Biresin® G46**, MDI-based isocyanate, brown-transparent, unfilled

Processing Data		Resin	Hardener
Individual components		Biresin® G46 AL	Biresin® G46
Viscosity, 25°C	mPas	approx. 11.000	approx. 200
Density	g/ml	1.78	1.22
Mixing ratio	in parts by weight	100	25
		Mixture	
Mixed viscosity, 25°C	mPas	approx. 3.000	
Potlife, 200 g, RT	min	20 - 25	
Demoulding time, RT, without postcuring	h	12 - 16	

Physical Dat (approx.-values)

Biresin® G46 AL resin with hardener			Biresin® G46
Colour			aluminium-grey*
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	91
Impact resistance	ISO 179	kJ/m²	9
Heat distortion temperature	ISO 75B	°C	80

* The colour can change to yellowish while exposition of light

Packaging

Individual components	Biresin® G46 resin	20 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 entrapment.
- 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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