

Biresin® G21 Fastcast resin, filled

Areas of Application

- Casting of master and core models, negatives and mouldings of medium size

Product Benefits

- Almost odourless
- Easy to mix by hand and very good flowability
- Short demoulding time and low shrinkage
- Very fine structure
- Very good mechanically workable, e. g. by milling and drilling resp. additional finishing with fine abrasives to high-quality surfaces

Description

- Basis Two component PUR system
- Component A **Biresin® G21**, polyol, light grey or black, filled
- Component B **Biresin® G21**, MDI-based isocyanate, brown-transparent, unfilled

Processing Data		Component A	Component B
Individual components		Biresin® G21	Biresin® G21
Viscosity, 25°C	mPa.s	~ 2,500	~ 40
Density	g/ml	1.74	1.23
Mixing ratio A : B	in parts by weight	100	15
		Mixture	
Mixed viscosity, 25°C	mPa.s	~ 2,100	
Potlife, 200 g, RT	min	5 - 6	
Demoulding time, RT	min	30	
Curing time, RT	d	3	

Physical Data (approx. values)

Biresin® G21 (A)			with component B	Biresin® G21	
Colour				light grey or black	
Density	ISO 1183	g/cm³		1.7	
Shore hardness	ISO 868	-		D 80	
E-Modulus	ISO 178	MPa		2,500	
Flexural strength	ISO 178	MPa		35	
Compressive strength	ISO 604	MPa		75	
Impact resistance	ISO 179	kJ/m²		5	
Heat distortion temperature	ISO 75B	°C		80	
Linear shrinkage	internal	%		0.16 - 0.20	

Packaging

Individual components **Biresin® G21 (A)** black, grey 25 kg; 8 kg; 6 x 1 kg net in a box
Biresin® G21 (B) 3.75 kg; 1.2 kg; 6 x 0.15 kg net in a box

Processing

- The material, processing and mould temperature must be from 18 to 25°C.
- Component A must be mixed thoroughly before use. Component B should be shaken well.
- It is necessary to 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 beginning at the lowest point 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 conditions (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

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