

Biresin® G33 EP-Casting resin, high abrasion resistant

Areas of Application

- Embedding of abrasion resistant ways
- Cupping tools, drop hammer matrixes, hydroforming and rubber cushion tools for metal sheet forming
- Marking and copy models
- Accommodations for appliances and tools
- Casting of punch ways and punch holders

Product Benefits

- Very good flowability
- Very good degassing
- Very hard and high abrasion resistant
- Very low shrinkage
- Very high edge stability and compressive strength
- In open moulds casting thickness up to 25 mm possible

Description

- Basis Two-component-epoxy-system
- Resin **Biresin® G33**, epoxy resin, black, filled
- Hardener **Biresin® S15**, amine, amber, unfilled

Processing Data		Resin	Hardener
Individual components		Biresin® G33	Biresin® S15
Viscosity, 25°C	mPas	approx. 15,500	approx. 50
Density	g/ml	1.93	0.99
Mixing ratio resin to hardener	in parts by weight	100	6
		Mixture	
Mixed viscosity, 25°C	mPas	approx. 6,000	
Potlife, 500 g, RT	min	45 - 60	
Demoulding time, RT	h	16	

Physical Data (approx.-values)

Biresin® G33 resin			with hardener	Biresin® S15
Density	ISO 1183	g/cm³		1.87
Shore hardness	ISO 868	-		D 90
E-Modulus	ISO 178	MPa		9,800 / 7,800*
Flexural strength	ISO 178	MPa		88
Compressive strength	ISO 604	MPa		120
Impact resistance	ISO 179	kJ/m²		8 / 10*
Heat distortion temperature	ISO 75B	°C		60 / 95*
Linear shrinkage	internal	%		0.05

* values after post curing: 2 h / 80°C

Packaging

Individual components	Biresin® G33 resin	5.8 kg net
	Biresin® S15 hardener	0.35 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.
- 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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