

Biresin® G33 EP-Casting resin with high abrasion resistance

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
- Accomodations 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
- Component A **Biresin® G33**, epoxy resin, black
- Component B **Biresin® S15**, amine, amber

Processing Data		Component A	Component B
Individual components		Biresin® G33	Biresin® S15
Viscosity, 25°C	mPa.s	~ 15,500	~ 50
Density	g/ml	1.93	0.99
Mixing ratio resin A : B	in parts by weight	100	6
		Mixture	
Mixed viscosity, 25°C	mPa.s	~ 6,000	
Potlife, 500 g, RT	min	45 - 60	
Demoulding time, RT	h	16	

Physical Data (approx. values)

Biresin® G33 (A)	with component B	Biresin® S15
Density	ISO 1183 g/cm ³	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/m ²	8 / 10*
Heat distortion temperature	ISO 75B °C	60 / 95*
Linear shrinkage	internal %	0.05

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

Packaging

Working packages **Biresin® G33 AB Pack** 1 x 5.8 kg net component A and
1 x 0.35 kg net component B in a box

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 the two components are 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® 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

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