

SikaBiresin® B180 Thixotropic Adhesive for SikaBlock® tooling boards

Areas of Application

- For mechanically high-tensile bonding of **SikaBlock®** tooling boards for manufacture of foundry models, metal sheet forming tools and other models
- For bonding especially of **SikaBlock® M930, M945, M960, M970, M980, M1000, M1050 and LAB 920, LAB 850, LAB 1000**

Product Benefits

- Thixotropic consistency, optimal wetting properties
- Very high adhesive strength and mechanical data
- High heat distortion temperature
- Favourable physiological characteristics
- Glued joints hardly visible (semi-transparent)
- Good chemical resistance, against water, mineral oils and grease

Description

- Basis Two component epoxy adhesive
- Component A **SikaBiresin® B180**, epoxy resin, colourless, thixotropic
- Component B **SikaBiresin® B180**, amine, amber

Processing Data	Component A	Component B
Individual components	SikaBiresin® B180	SikaBiresin® B180
Density, 25°C	g/ml	1.16
Mixing ratio A : B	in parts by weight	100
		32
	Mixture	
Mixed viscosity, RT	mPa.s	thixotropic
Consumption, average	kg/m²	~ 0,7
Potlife, RT	min	15
Setting time, RT (workable)	h	16

Physical Data (approx.-values)

SikaBiresin® B180 (A)	with component B	SikaBiresin® B180	
Density	ISO 1183	g/cm³	1.16
Curing conditions	time / temperature	14 d / RT	2 h / 80°C
Shore hardness	ISO 868	-	D 82
			D 84
E-Modulus	ISO 178	MPa	2.650
			2.450
Flexural strength	ISO 178	MPa	90
			100
Impact resistance	ISO 179	kJ/m²	30
			30
Heat distortion temperature	ISO 75B	°C	55
			90

Packaging

Individual components	SikaBiresin® B180 (A) SikaBiresin® B180 (B)	6 x 0.9 kg net in a box 6 x 0.29 kg net in a box
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Processing

- The material, processing and substrate temperature must be from 18 to 25°C. Lower temperatures result in longer setting times.
- The resin components must be mixed thoroughly before use and applied by brush or toothed spatula.
- Make sure, glued parts are clamped together with adequate force to ensure that the bonding-joint area has a thickness of approx. 0.2 up to 1 mm and is free of air bubbles.
- Before application of adhesive ensure surfaces are clean, dry, free of dust and grease (cleaning e. g. with Sika® Reinigungsmittel 5). Abrasion of surfaces can increase adhesion.

Storage

- Minimum shelf life of SikaBiresin® B180 resin (A) is 24 month and of Biresin® SikaBiresin B180 hardener (B) 12 month under room condition (18 - 25°C), when stored in original un-opened containers.
- 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

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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