

PROVISIONAL PRODUCT DATA SHEET

SikaBiresin[®] B181

ADHESIVE FOR SIKABLOCK[®] TOOLING BOARDS

APPLICATIONS

- For mechanically high-tensile bonding of **SikaBlock[®]** tooling boards
- For bonding especially of **SikaBlock[®] M930, M935, M945, M960, M980, M1000, M1050 and LAB 850, LAB 1000**

MAIN PROPERTIES

- Optimal wetting properties
- Very high bonding strength and mechanical data
- High heat distortion temperature
- Glued joints hardly visible (semi-transparent)
- Good chemical resistance, against water, mineral oils and grease

DESCRIPTION

Basis	Two component epoxy adhesive
Component A	SikaBiresin[®] B181 , epoxy resin, colorless, thixotropic
Component B	SikaBiresin[®] B181 , amine, amber

PHYSICAL PROPERTIES

		Resin (A)	Hardener (B)
Components		SikaBiresin[®] B181	SikaBiresin[®] B181
Density, 25 °C	g/ml	1.16	0.97
Mixing ratio	by weight	100	32
		Mixture	
Viscosity, RT	mPa.s	Thixotropic	
Consumption, average	kg/m ²	0.7	
Pot life, RT	min	15	
Setting time, RT (workable)	h	16	

MECHANICAL PROPERTIES

(approx. values)

Density	ISO 1183	g/cm ³	1.16	
Curing conditions	time / temperature		14 days / RT	2 hours / 80 °C
Shore hardness	ISO 868	D	82	84
Flexural modulus	ISO 178	MPa	2,650	2,450
Flexural strength	ISO 178	MPa	88	100
Heat distortion temperature	ISO 75 B	°C	53	88

PACKAGING UNITS

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|--|-------------|
| ■ Resin (A), SikaBiresin® B181 | 2.7 kg |
| ■ Hardener (B), SikaBiresin® B181 | 6 x 0.29 kg |

PROCESSING DATA

- The material and processing temperature shall be between 18 °C and 25 °C.
- The components must be mixed thoroughly before use and applied by brush or toothed spatula on both surfaces.
- Make sure, glued parts are clamped together with adequate force to ensure that the bonding-joint area has a thickness of approx. 0.2 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® Cleaner G+M). Grinding of the surfaces can increase adhesion.
- Containers must be closed tightly immediately after use to prevent moisture and dust ingress.
- The residual material needs to be used up as soon as possible.

STORAGE CONDITIONS

Shelf life	■ Resin (A), SikaBiresin® B181	24 months
	■ Hardener (B), SikaBiresin® B181	12 months
Storage temperature	■ Resin (A), SikaBiresin® B181	15 °C – 25 °C
	■ Hardener (B), SikaBiresin® B181	15 °C – 25 °C

FURTHER INFORMATION

The information herein is offered for general guidance only. Advice on specific applications is available on request from the Technical Department of Sika Advanced Resins. Copies of the following publications are available on request: Safety Data Sheets

BASIS OF PRODUCT DATA

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

HEALTH AND SAFETY INFORMATION

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

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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