

PRODUCT DATA SHEET

SikaBiresin® L201

Laminating resin for production of tools

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	SikaBiresin® L201 (A)	SikaBiresin® L201 (B)
Chemical base	Epoxy resin	Amine
Color	Yellowish-transparent	Yellowish-transparent
	mixed	Yellowish-transparent
Mixing ratio	by weight	100 : 20
Density		
	1.14 kg/l	1.01 kg/l
	cured	1.1 kg/l
Viscosity (CQP538-2 / BROOKFIELD LVT)		
	2000 mPa·s	400 mPa·s
	mixed	1200 mPa·s
Pot life (CQP021-3 / Gel Timer TECAM)	500 g at 23 °C	50 minutes
Maximal laminating thickness	7 mm	
Shore D hardness (CQP023-1 / ISO 868)	82 ^A	
Flexural strength (ISO 178)	70 MPa ^A	
Flexural modulus (CQP027-2 / ISO 178)	2200 MPa ^A	
Tensile strength (CQP036-1 / ISO 527)	40 MPa ^A	
Glass transition temperature (CQP053-1 / ISO 11359)	54 °C	
Shelf life	24 months	

CQP = Corporate Quality Procedure

^A) curing condition: 23 °C for 12 hours + 40 °C for 12 hours

DESCRIPTION

SikaBiresin® L201 is an epoxy laminating resin with low viscosity for production of tools and negatives.

PRODUCT BENEFITS

- Easy processing and application
- Low viscosity
- Good fabric impregnation

AREAS OF APPLICATION

SikaBiresin® L201 is designed for production of tools and negatives by casting resin concrete or by wet lay-up laminating process. This product is suitable for experienced professional users only.

METHOD OF APPLICATION

Surface preparation

The material and processing temperature shall be between 18 °C and 25 °C. Make sure the mold or master model is clean, dry, dust and grease free. If mold or master-model surface is porous, it must be properly sealed prior applying the release agent. Wax-based release agents are recommended. For further information regarding Sika release agent consult the corresponding Product Data Sheet.

Mixing process

Prior to use check the material for homogeneity and crystallization. After prolonged storage at low temperature, crystallization of components may occur. This process can be reversed by heating the affected component to a maximum of 70 °C until the crystals have disappeared. Allow to cool down to requested processing temperature before use. Prior to mixing, component A must be stirred thoroughly. Both components must be mixed homogeneously respecting the defined mixing ratio. The mixing can be performed with a spatula or a machine stirrer at ≤ 300 rpm. To ensure a homogeneous and complete mixing, pour the mixed product into a new container and mix again shortly, considering the pot life. Containers must be closed tightly immediately after use to prevent moisture ingress. Once opened the Product shall be used as soon as possible.

Application

The fabric must be suitable for the use of epoxy resins. SikaBiresin® L201 is applied to the selected fiber fabric (e.g. glass fiber mats) using a brush or hand roller.

The reinforcing fibers are laid in layers "wet on wet". The fibers must be impregnated with the resin without air entrapments. Entrapped air is expelled from the inside to the outside. If the surface needs to be further laminated or bonded, it is recommended to use a peel ply. Ensure enough and adequate laminate to obtain the required form strength and to avoid deformation during demolding. Further post curing of the demolded part can improve the final mechanical properties. Depending on the geometry and weight of the part, it is recommended to use a conformer while post curing.

STORAGE CONDITIONS

Both components must be stored at temperature between 15 °C and 25 °C in original unopened containers.

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 Industry. Copies of the following publications are available on request:

- Safety Data Sheets

PACKAGING INFORMATION

SikaBiresin® L201 (A)

Pail	25 kg
Drum	50 kg 220 kg

SikaBiresin® L201 (B)

Canister	4 kg 5 kg
Drum	44 kg

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.

DISCLAIMER

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.

