

PRODUCT DATA SHEET

SikaBiresin® L402

Low density epoxy laminating paste for multi-purpose applications

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	Component A SikaBiresin® L402	Component B SikaBiresin® L400
Chemical base	Epoxy resin, fibrous paste	Amine
Color	White	Green
	mixed	Light green
Mixing ratio	by weight	100 : 14
Density		0.68 kg/l
	cured	0.72 kg/l
Pot life (CQP021-3 / Gel Timer TECAM)	570 g at 23 °C	120 minutes
Demolding time		24 hours
Curing time	at 23 °C	7 days
Maximal laminating thickness		40 mm
Shore D hardness (CQP023-1 / ISO 868)	D1	80 ^A
	D15	78 ^A
Flexural strength (ISO 178)		42 MPa ^A
Flexural modulus (CQP027-2 / ISO 178)		4000 MPa ^A
Glass transition temperature (CQP053-1 / ISO 11359)		70 °C ^A
Coefficient of thermal expansion (CQP053-1 / ISO 11359)	10 – 60 °C	24 x 10 ⁻⁶ 1/K ^A
Shelf life	12 months	24 months

CQP = Corporate Quality Procedure

^{A)} curing condition: 23 °C for 24 hours + 60 °C for 16 hours

DESCRIPTION

SikaBiresin® L402 is an epoxy laminating paste for multi-purpose applications, e.g. for using as an alternative to the usual laminate build-up with laminating resin and reinforcing fabrics etc.

PRODUCT BENEFITS

- Low density
- High stiffness and dimensional stability
- Low odor
- Mixing by hand or mixer

AREAS OF APPLICATION

SikaBiresin® L402 can be used as an alternative to conventional laminate build-up systems, replacing laminating resins and reinforcing fabrics.

The material is suitable for the production of molds and negatives, checking fixtures and positioning tools.

The Product is also designed for the formation of fillets and local reinforcements.

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.

Mixing process

Component B must be shaken well before use.
Both components must be mixed homogeneously respecting the defined mixing ratio. The required mixing quality is achieved when the mixture has a uniform color. Small amounts of 1 – 2 kg can be processed by hand, for greater amounts it is recommended to use mechanical mixer with dough hook.
Prolonged mixing may raise the temperature of the reaction mass and shorten 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

If larger quantities are prepared it is recommended to divide the mass in smaller portions to avoid a faster exothermic reaction. It is recommended to use a coupling layer and apply the ready-mixed laminating paste in an even layer.
Apply small patches to avoid air entrapment. Smooth and compact the layers with a roller or by hand.

Depending on laminate thickness and processing temperature, the demolding time and the pot life of the laminating resin may vary. 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® L402 (A)

Pail	10 kg
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SikaBiresin® L400 (B)

Canister	1.4 kg
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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.

