

PRODUCT DATA SHEET

SikaBiresin® UR411

Elastomeric casting resin for mold making

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	Component A SikaBiresin® UR411	Component B SikaBiresin® RG530
Chemical base	Polyol, unfilled	MDI-based isocyanate, unfilled
Color	Yellowish	Amber
	mixed	Beige
Density	1.02 kg/l	1.23 kg/l
	cured	1.1 kg/l
Mixing ratio	by weight	100 : 48
Viscosity (CQP029-4)	1000 mPa·s	175 mPa·s
	mixed	800 mPa·s
Pot life (CQP021-4)	500 g at 23 °C	60 seconds
Demolding time	tool temperature 50 °C	90 minutes
Shore A hardness (CQP023-1 / ISO 868)	87 ^A	
Tensile strength (CQP036-6 / ISO 527)	14 MPa ^A	
Tear strength (CQP045-1 / ISO 34)	21 N/mm ^A	
Elongation at break (CQP036-6 / ISO 527)	100 % ^A	
Shelf life	12 months	

CQP = Corporate Quality Procedure

^{A)} curing condition: 23 °C for 14 days

DESCRIPTION

SikaBiresin® UR411 is a 2-component polyurethane elastomeric casting resin for mold making.

The Product is usually processed with two-component dosing equipment.

PRODUCT BENEFITS

- Fast curing
- Good elongation at break
- Good tensile strength
- Casting thickness up to 20 mm

AREAS OF APPLICATION

SikaBiresin® UR411 is designed for casting of flexible molds for direct casting of decorative and safety edges on panels e.g. for furniture. This product is suitable for experienced professional users only. Tests under actual processing conditions and with additional materials such as coatings and release agents must be performed to proof material compatibility.

METHOD OF APPLICATION

Surface preparation

Surfaces must be clean, dry, and free from grease, oil and dust.
If mold or master-model surface is porous, it must be sealed prior applying the release agent.
It is recommended to use wax-based release agents. 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 easily 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.
Consider, pot life is affected by temperature and mixed quantity.
Prior to mixing, component A must be stirred thoroughly.
Both components must be mixed homogeneously respecting the defined mixing ratio.
Note: Both 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 material and processing temperature shall be between 18 °C – 25 °C.
SikaBiresin® UR411 is processed using 2-component low-pressure equipment. These equipment must be specifically set up for processing parts to be manufactured.
The mixing process is performed by dynamic or static-dynamic mixing units.
Demolding time may vary depending on casted thickness and room temperature.
If using wood as support core or PUR foam boards with low to middle density, a previous sealing is necessary.
The compatibility of the sealing on PUR foam must be tested separately.

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® UR411 (A)

Hobbock	50 kg
Drum	200 kg

SikaBiresin® RG530 (B)

Bottle	0.975 kg
Canister	10 kg 20 kg
Drum	200 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.

