BUILDING TRUST

PRODUCT DATA SHEET

SikaBiresin® UR595 L6

Elastomeric casting resin for production of parts and molds

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties		Component A SikaBiresin® UR505	Component B SikaBiresin® UR595 L6
Chemical base		Isocyanate	Polyol
Color		Straw yellow	Blue, light blue, white
	mixed	Blue, light blue, white	
Density		1.21 kg/l	1.19 kg/l
	cured	1.25 kg/l	
Mixing ratio	by weight	55 : 100	
	by volume	54 : 100	
Viscosity (CQP029-4)		450 mPa·s	1500 mPa·s
	mixed	1000 mPa·s	
Pot life (CQP021-3 / Gel Timer TECAM)	155 g at 23 °C	6 minutes	
Demolding time	at 23 °C	12 hours	
	at 80 °C	1 hour	
Curing time	at 23 °C	5 days	
Casting thickness		up to 50 mm	
Shore A hardness (CQP023-1 / ISO 868)		94 [A]	
Tensile strength (CQP036-6 / ISO 37)		16 MPa [A]	
Tear strength (CQP045-1 / ISO 34)		64 kN/m [A]	
Elongation at break (CQP 036-6 / ISO 37)		400 % [A]	
BASHORE resilience (ASTM 2632)		25 % [A]	
Glass transition temperature TMA (CQP053-1 / ISO 11359)		0 °C [A]	
Service temperature		-20 – 70 °C	
Shelf life		9 months	12 months

CQP = Corporate Quality Procedure

[A] curing condition: 80 °C for 12 hours

DESCRIPTION

SikaBiresin® UR595 L6 is a 2-component polyurethane elastomeric casting resin for production of parts and molds.

PRODUCT BENEFITS

- Good elongation at break
- Casting thickness up to 50 mm
- Good tear strength
- Easy processing
- Quick setting at room temperature

AREAS OF APPLICATION

SikaBiresin® UR595 L6 is designed for production of semi-flexible parts and molds by hand casting or with 2-component low pressure equipment.

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

The material, processing and mold or master-model temperature shall be between 18 °C – 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 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 60 °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 B must be stirred thoroughly.
Both components must be mixed thoroughly respecting the defined mixing ratio. The mixing can be performed with a spatula or a machine stirrer at ≤ 300 rpm.
To secure homogeneous and complete mixing, pour the mixed product into another container and mix again shortly, considering the pot life.
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

Immediately after mixing pour the Product into the mold starting at the deepest point.
Demolding time may vary depending on casted thickness and room temperature.
To achieve the highest performance, leave the elastomeric mold at a temperature ≥ 23 °C for 5 days before using it.

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® UR505 (A)

Canister	11 kg
Drum	225 kg
IBC	1125 kg

SikaBiresin® UR595 L6 blue, white (B)

Pail	20 kg

SikaBiresin® UR595 L6 light blue (B)

Drum	205 kg
IBC	1000 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.

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