

PRODUCT DATA SHEET

SikaBiresin® UR702 / SikaBiresin® UR315 (UR 7802 / UR 3415)

POLYURETHANE CASTING ELASTOMERE – SHORE A 45 – COLD CURING

APPLICATIONS

- Casting resin for production of parts and molds requiring good elastomeric properties and easy process.
- Unfilled resin easy to pigment in any colors. Good final properties. Cast by hand or with a 2K machine.

MAIN PROPERTIES

- Low shrinkage after demolding
- Low moisture sensitivity
- Friendly use (1:1 mix ratio)
- Easy to pigment

DESCRIPTION

Basis	Two component polyurethane system
Component A	SikaBiresin® UR702 , isocyanate, amber
Component B	SikaBiresin® UR315 , polyol, amber to dark amber

PHYSICAL PROPERTIES

		Isocyanate (A)	Polyol (B)
Components		SikaBiresin® UR702	SikaBiresin® UR315
Viscosity, 25 °C	mPa.s	1,500	250
Density, 25 °C	g/cm ³	1.05	1.00
Mixing ratio A:B	in parts by weight	50	100
		Mixture	
Colour		Amber translucent	
Viscosity, 25 °C	mPa.s	~ 1,200	
Pot life, 25 °C, 100 g	min	12 – 18	
Demolding time at 23° C	h	16	
Curing time at 23° C	d	5	
Maximal casting thickness	mm	100	

MECHANICAL PROPERTIES

approx. values

Density	ISO 1675	g/cm^3	1.02
Shore hardness	ISO 868	Shore A1	A 45
Tensile strength	ISO 37	MPa	2.3
Tear strength	ISO 34	kN/m	17
BASHORE resilience	ASTM 2632	%	46
Elongation at break	ISO 37	%	650

THERMAL AND SPECIFIC PROPERTIES

approx. values, hardening conditions 16 h at 70 °C

Working temperature	-	°C	- 20 / + 80
Glass transition temperature	ISO 11357	°C	< 0

PACKAGING UNITS

- | | |
|--------------------------------------|-------|
| ■ Isocyanate (A), SikaBiresin® UR702 | 10 kg |
| ■ Polyol (B), SikaBiresin® UR315 | 10 kg |

PROCESSING DATA

- The material, processing and mold or master-model temperature must be at least 18 °C – 25 °C.
- Make sure the mold or master model is clean, dry, dust free 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.
- Component B must be stirred thoroughly before use. Component A must be shaken well before use.
- 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.
- Immediately after mixing pour the Product starting at the deepest point.

STORAGE CONDITIONS

Shelf life	■ Isocyanate (A), SikaBiresin® UR702	12 months
	■ Polyol (B), SikaBiresin® UR315	12 months
Storage temperature	■ Isocyanate (A), SikaBiresin® UR702	18 – 25 °C
	■ Polyol (B), SikaBiresin® UR315	18 – 25 °C
Crystallization	■ After prolonged storage at a temperature below 15°C both components could crystallize.	
	■ This is easily removed by warming up for 4 to 6 hours to 50 °C.	
	■ Excessive heating of both components may cause a degradation of the final product (temperature > 60°C or heating time > 12 hours).	
Opened packagings	■ Containers must be closed tightly immediately after use to prevent moisture ingress.	
	■ The residual material needs to be used up as soon as possible.	

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BUILDING TRUST



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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