

PRODUCT DATA SHEET

SikaBiresin® UR730 / SikaBiresin® UR703 (UR 7830 / UR 7803)

POLYURETHANE CASTING ELASTOMER – SHORE A 30-40 – POT LIFE 40 – 60'

APPLICATIONS

- Polyurethane casting elastomer designed to produce flexible molds or parts, by hand casting or with help of a 2-component low pressure machine

MAIN PROPERTIES

- Adjustable hardness A30 to A40
- Low moisture sensitivity
- Low shrinkage after hardening
- High elongation at break
- Good chemical resistance

DESCRIPTION

Basis	Two component polyurethane system
Component A	SikaBiresin® UR703 , isocyanate, straw yellow
Component B	SikaBiresin® UR730 , polyol, beige

PHYSICAL PROPERTIES

		Isocyanate (A)	Polyol (B)
Components		SikaBiresin® UR703	SikaBiresin® UR730
Viscosity, 25 °C	mPa.s	~ 3,200	~ 1,950
Density, 25 °C		1.04	1.22
Mixing ratio A:B	in parts by weight	40 or 45	100
		Mixture 40/100	Mixture 45/100
Colour		Beige	
Viscosity, 25 °C	mPa.s	~ 2,300	~ 2,350
Pot life, 25 °C, 160 g	min	40 – 60	
Demoulding time at 23 °C	h	~ 24	
Curing time at 23 °C	h	~ 96	
Maximal casting thickness	mm	~ 150	

MECHANICAL PROPERTIES

approx. values

		Mixing ratio A/B	40/100	45/100
Density	ISO 2781	g/cm ³	1.16	
Shore hardness	ISO 868	Shore A1	A 30	A 40
Tensile strength	ISO 37	MPa	1.5	2.5
Tear strength	ISO 34	kN/m	8.5	10
Elongation at break	ISO 37	%	1,500	1,400
Linear shrinkage (1000 x 50 x 10 mm)	Internal	mm/m	< 1	

PACKAGING UNITS

- | | |
|---|--|
| ■ Isocyanate (A), SikaBiresin® UR703 | 4.65 kg / 9.3 kg |
| ■ Polyol (B), SikaBiresin® UR730 | 10.33 kg |
| ■ Isocyanate (A), SikaBiresin® UR703 | 8.0 kg (for full containers loading only) |
| ■ Polyol (B), SikaBiresin® UR730 | 17.8 kg (for full containers loading only) |

PROCESSING DATA

- The material, processing and master-model temperature must be at least 18 – 25 °C.
- If master-model surface is porous it must be sealed prior applying release agent.
- Recommended release agents are was based. For more information, and recommendation see Product Data Sheets of Sika Release agents or contact local technical assistance.
- When using pigments, it is recommended to add max 1% of SikaBiresin® Color Paste. Add the pigment in component B and stir to homogenize prior mixing with component A.
- In case of a slightly wet model (gypsum, plaster type), ratio 45A/100B (kit 4.65+10.33 kg) has to be used in order to get a good curing on model surface.
- Both components have to be mixed thoroughly with a spatula or low-rpm stirrer according to mixing ratio.
- To secure homogeneous and complete mixing, fill the mixture in a second empty container and mix again briefly. Then pour immediately starting from the deepest point.
- Demolding time may vary depending on casted thickness and room temperature. Refer to the table above or please check in your own conditions.
- To achieve the highest performance, leave the elastomeric mould at 23 °C for 5 days before using it.
- To favor concrete mould longevity we invite you to check compatibility of your local release agent for concrete or contact our local technical support.
- In case of use with a 2-component low-pressure machine please make sure with machine supplier about its appropriateness, accuracy and maintenance.

STORAGE CONDITIONS

Shelf life	■ Isocyanate (A), SikaBiresin® UR703	12 months
	■ Polyol (B), SikaBiresin® UR730	12 months
Storage temperature	■ Isocyanate (A), SikaBiresin® UR703	18 – 25 °C
	■ Polyol (B), SikaBiresin® UR730	18 – 25 °C
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.	

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.

Contact

SIKA DEUTSCHLAND GMBH

Business Unit Industry
Stuttgarter Straße 139
72574 Bad Urach
Phone: +49 7125 940-7692
E-Mail: industry@de.sika.com
Website: www.sika.de

SIKA AUTOMOTIVE FRANCE S.A.S.

ZI des Béthunes - 15, Rue de l'Équerre
95310 Saint-Ouen-l'Aumône
CS 40444
95005 Cergy Pontoise Cedex - FRANCE
Phone: +33 1 34 40 34 60
Fax: +33 1 34 21 97 87
E-Mail: advanced.resins@fr.sika.com
Website: www.sikaadvancedresins.fr

Sika S.A.U.

Carretera de Madrid a Irún – km 14.5
P.I. Congost 28108 Alcobendas (Madrid) - SPAIN
Phone: +34 93 225 16 20
E-Mail: sar-sales@es.sika.com
Website: www.sikaadvancedresins.es

Sika Italia S.p.A.

Via Luigi Einaudi 6
20068 Peschiera Borromeo (MI) - Italy
Phone: +39 02 54778111
Fax +39 02 54778 119
E-Mail: info@sika.it
Website: www.sika.it

Sika Limited

Head Office, Watchmead – Welwyn
Garden City – AL7 1BQ – United Kingdom
Phone: +44 1707 394444
E-Mail: industry-sales@uk.sika.com
Website: www.gbr.sika.com

SIKA AUTOMOTIVE SLOVAKIA S.R.O.

Tovarenska 49
953 01 Zlate Moravce - SLOVAKIA
Phone: +421 2 5727 29 33
Fax: +421 37 3000 087
E-Mail: SikaAdvancedResins@sk.sika.com
Website: www.sikaadvancedresins.com

Sika Industry – Tooling, Resins and Marine

30800 Stephenson Highway
Madison Heights, Michigan 48071 - USA
Phone: +1 248 588 2270
Fax: +1 248 616 7452
E-Mail: advanced.resins@us.sika.com
Website: www.sikaindustry.com

SIKA AUTOMOTIVE EATON RAPIDS, INC.

1611 Hults Drive
Eaton Rapids, Michigan 48827 - USA
Phone: +1 517 663 81 91
Fax: +1 517 663 05 23
E-Mail: advanced.resins@us.sika.com
Website: www.sikaadvancedresins.us

SIKA MEXICANA SA de CV

Av. Gustavo Baz #309 Centrum Park
54060 Tlanepantla Estado de MEXICO
Phone: +52 442 238 5800
E-Mail: roman.octavio@mx.sika.com

SIKA AUTOMOTIVE SHANGHAI CO. LTD.

N°53 Tai Gu Road
Wai Gao Qiao
Free Trade Zone, Pudong
200131 Shanghai - CHINA
Phone: +86 21 58 68 30 37
Fax: +86 21 58 68 26 01
E-Mail: industry@cn.sika.com
Website: www.sika.cn

Sika Ltd.

10 F, Shinagawa Intercity Tower B.
2-15-2 Konan, Minato-ku
Tokyo 108-6110 - JAPAN
Phone: +81 3 6433 2314
Fax: +81 3 6433 2102
E-Mail: advanced-resins@jp.sika.com
Website: www.jpn.sika.com

SIKA INDIA PVT LTD,

Plot No. Pap-V-90/1,
Chakan Industrial Area,
Phase-II, Vasuli, Khed, PUNE,
Maharashtra – 410501
E-Mail: info.india@in.sika.com

PRODUCT DATA SHEET

SikaBiresin® UR730 / SikaBiresin® UR703

(UR 7830 / UR 7803)

June 2021, Version 01

Sika Advanced Resins