

PRODUCT DATA SHEET

SikaBiresin® UR360

POLYURETHANE CASTING ELASTOMER – SHORE A 85 – COLD CURING

APPLICATIONS

- Production of semi flexible moulds, forming tools or parts requiring good abrasion and tear resistance properties

MAIN PROPERTIES

- Good tear resistance
- Very good hydrolysis resistance
- High abrasion resistance
- Good elongation at break

DESCRIPTION

Basis	Two component polyurethane system
Component A	SikaBiresin® UR350, isocyanate, colorless
Component B	SikaBiresin® UR360, polyol, black

PHYSICAL PROPERTIES

		Isocyanate (A)	Polyol (B)
Components		SikaBiresin® UR350	SikaBiresin® UR360
Viscosity, 25 °C	mPa.s	19,000	250
Density, 25 °C		1.08	1.03
Mixing ratio A:B	in parts by weight	100	40
	In parts by volume	100	42
		Mixture	
Colour		Black	
Viscosity, 25 °C	mPa.s	3,600	
Pot life, 25 °C, 150 g	min	20	
Demoulding time at 23 °C		24	
Demoulding time at 80 °C	h	2	
Curing time at 23 °C		144	
Curing time at 80 °C (curing after gelification)	h	4	
Maximal casting thickness	mm	80	

MECHANICAL PROPERTIES

approx. values

Density	ISO 2781		1.09
Shore hardness	ISO 868	Shore A1 / A15	A 85 / A 84
Tensile strength	ISO 37	MPa	17
Tear strength	ISO 34	kN/m	83
Elongation at break	ISO 37	%	810
BASHORE resilience	ASTM 2632	%	42
Linear shrinkage (specimen 250x50x3mm)	-	mm/m	3
Abrasion resistance (TABER)	ISO 5470	mm ³ / 100U	18

THERMAL AND SPECIFIC PROPERTIES

approx. values

Working temperature	-	°C	- 40 / + 80
Glass transition temperature	ISO 11357	°C	- 65
Coefficient of thermal expansion (+0 °C to +40 °C)	ISO 11359	10 ⁻⁶ K ⁻¹	200

PACKAGING UNITS

- | | |
|--------------------------------------|----------------------|
| ■ Isocyanate (A), SikaBiresin® UR350 | 20 kg; 6 x 1 kg net |
| ■ Polyol (B), SikaBiresin® UR360 | 8 kg; 6 x 0,4 kg net |

PROCESSING DATA

- The material, processing and mould temperature should be at least 18 – 25 °C.
- Recommended release agents are Wax based. For more information, see Product Data Sheets of the release agents.
- Pay attention to dry conditions and dry mould surfaces while processing.
- Both components have to be mixed thoroughly according to mixing ratio and poured immediately into the released mould with beginning at the lowest point.
- Isocyanate component could be heated up to 40°C to make it more fluid but pot life will be reduced.

STORAGE CONDITIONS

Shelf life	■ Isocyanate (A), SikaBiresin® UR350	12 months
	■ Polyol (B), SikaBiresin® UR360	12 months
Storage temperature	■ Isocyanate (A), SikaBiresin® UR350	18 – 25 °C
	■ Polyol (B), SikaBiresin® UR360	18 – 25 °C
Crystallization	■ After prolonged storage below 15 °C, crystallization of isocyanate (A) may occur. ■ This is easily removed by warming up for 4 to 6 hours at 60 °C. ■ Excessive heating of both components may cause a degradation of the final cured product (temp >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.	

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

PRODUCT DATA SHEET

SikaBiresin® UR360

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Sika Advanced Resins

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 enduse 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

Stuttgarter Straße 139
72574 Bad Urach - GERMANY
Phone: +49 7125 940 492
Fax: +49 7125 940 401
E-Mail: tooling@de.sika.com
Website: www.sikaadvancedresins.de

SIKA AUTOMOTIVE FRANCE S.A.S.

ZI des Béthunes - 15, Rue de l'Equerre
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

AXSON TECHNOLOGIES SPAIN, S.L.

C/Guardaagullés, 8 – P.I. Congost - 08520
Les Franqueses del Valles (Barcelona) - SPAIN
Phone: +34 93 225 16 20
Fax: +34 93 225 03 05
E-Mail: spain@axson.com
Website: www.sikaadvancedresins.es

AXSON ITALIA S.R.L.

Via Morandi 15
21047 Saronno (Va) – ITALY
Phone: +39 02 96 70 23 36
Fax: +39 02 96 70 23 69
E-Mail: axson@axson.it
Website: www.sikaadvancedresins.it

AXSON UK LTD

Unit 15 Studlands Park Ind. Estate
Newmarket Suffolk, CB8 7AU - UNITED KINGDOM
Phone: +44 1638 660 062
Fax: +44 1638 665 078
E-Mail: sales.uk@axson.com
Website: www.sikaadvancedresins.uk

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 ADVANCED RESINS US

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.sikaadvancedresins.us

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 AUTOMOTIVE MEXICO S.A. DE C.V.

Ignacio Ramirez #20 Despacho 202 Col.
Tabacalera C.P. 06030 CDMX - MEXICO
Phone: +52 55 5264 49 22
E-Mail: marketing@axson.com.mx
Website: www.sikaadvancedresins.mx

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: marketing.china@axson.com
Website: www.sikaaxson.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

AXSON INDIA PVT. LTD.

Office n°8, Building Symphony C - 3rd Floor
Range Hills Road
Bhosale Nagar
Pune 411 020 - INDIA
Phone: +91 20 25560 710
Fax: +91 20 25560 712
E-Mail: info.india@axson.com
Website: www.sikaadvancedresins.in