

## PRODUCT DATA SHEET

# SikaBiresin® PX070 RG530 (Biresin® VG70)

## VACUUM CASTING POLYURETHANE

### APPLICATIONS

- Manufacture of rubber-like, flexible prototype parts
- Manufacture of sealing, bellows and other rubber-like moldings
- Manufacture of thin-walled moldings with complex structure

### MAIN PROPERTIES

- Simulation of rubber and soft PVC
- Fast curing with good flowability
- Very flexible
- Dyeable with **SikaBiresin® Colour Paste**

### DESCRIPTION

Basis	Two component polyurethane system
Component A	<b>SikaBiresin® PX070</b> , polyol, black, unfilled
Component B	<b>SikaBiresin® RG530</b> , MDI-based isocyanate, amber, unfilled

### PHYSICAL PROPERTIES

		Polyol (A)	Isocyanate (B)
Components		<b>SikaBiresin® PX070</b>	<b>SikaBiresin® RG530</b>
Viscosity, 25 °C	mPa.s	1,200	175
Density	g/cm <sup>3</sup>	1.06	1.23
Mixing ratio A : B	by weight	100	18
		<b>Mixture</b>	
Colour		Black	
Viscosity, 25 °C	mPa.s	900	
Pot life, 500 g, RT	min	5 – 6	
Demolding time	min	45 – 60	
Curing time, RT	d	1	

## MECHANICAL PROPERTIES

(approx. values after post curing 1 hour at 70 °C + 7 days at 23 °C)

Density	ISO 1183	g/cm <sup>3</sup>	1.1
Shore hardness	ISO 868	-	A 70
Tensile strength	ISO 527	MPa	5
Elongation at break	ISO 527	%	200
Tear resistance	ISO 34	N/mm	9

## PACKAGING UNITS

- |   |          |
|---|----------|
| ■ Polyol (A), <b>SikaBiresin® PX070</b>     | 5 kg     |
| ■ Isocyanate (B), <b>SikaBiresin® RG530</b> | 0.975 kg |

## PROCESSING DATA

- The material and processing temperature shall be between 18 °C and 25 °C.
- Temperature of a silicone mold shall be at least 70 °C.
- The material can either be used manually or in a vacuum casting machine.
- 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.
- Component A must be shaken well before use.
- **Machine casting:** Weigh the isocyanate into the upper mixing cup depending on the mixing ratio, taking into account the residual material in the cup. Weigh the polyol into the lower mixing cup according to the mixing ratio.
- Both components shall be evacuated separately under vacuum until air bubbles disappeared.
- After evacuation, both components shall be mixed in vacuum chamber for 45 seconds – 1 minute, always considering the pot life.
- **Manually:** 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.
- After mixing manually the mixture shall be evacuated until air bubbles disappeared, always considering the pot life.
- Immediately after mixing pour the product into the preheated silicone mold. After casting, the mold must be placed in an oven preheated to 70 °C for 45 – 60 minutes to cure.
- Containers must be closed tightly immediately after use to prevent moisture ingress.
- Once opened the Product shall be used up as soon as possible.

## STORAGE CONDITIONS

Shelf life	■ Polyol (A), <b>SikaBiresin® PX070</b>	6 months
	■ Isocyanate (B), <b>SikaBiresin® RG530</b>	6 months
Storage temperature	■ Polyol (A), <b>SikaBiresin® PX070</b>	18 °C – 25 °C
	■ Isocyanate (B), <b>SikaBiresin® RG530</b>	18 °C – 25 °C

## 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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