

## Biresin® RG56 Low pressure RIM-system

### Areas of Application

- Manufacture of housings and coverings
- Manufacture of very impact resistant technical parts, e. g. tuning parts for cars
- Manufacture of thin walled mouldings with complexe structure

### Product Benefits

- Fast curing with good flowability
- Short demoulding time
- Very abrasion resistant surface
- Simulation of PE / PP and ABS with good impact resistance

### Description

- Basis Two component PUR system
- Component A **Biresin® RG56**, polyol, beige, grey and black
- Component B **Biresin® U5**, MDI-based isocyanate, brown

Processing Data		Component A	Component B
<b>Individual components</b>		<b>Biresin® RG56</b>	<b>Biresin® U5</b>
Viscosity, 25°C	mPa.s	~ 2,900	~ 110
Density	g/cm³	1.06	1.23
Mixing ratio A : B	in parts by weight	100	80
		<b>Mixture</b>	
Potlife, RT	s	50	
Demoulding time, tool temperature 60°C	min	4 - 6	
Curing time, RT	d	~ 1	

### Physical Data (approx. values)

Biresin® RG56 (A) with component B			Biresin® U5
Processing temperatures			tool: 60°C, material: RT
Density	ISO 1183	g/cm³	1.18
Shore hardness	ISO 868	-	D 82
E-Modulus	ISO 178	MPa	1,650
Flexural strength	ISO 178	MPa	67
Tensile strength	ISO 527	MPa	45
Elongation at break	ISO 527	%	15
Impact resistance	ISO 179	kJ/m²	60
Heat distortion temperature	ISO 75B	°C	100 / 125*

\* values after post curing: 4h / 80°C + 2h / 120°C

### Packaging

Individual components	<b>Biresin® RG56 A</b> beige	1000 kg; 200 kg net
	<b>Biresin® RG56 A</b> grey and black	200 kg; 20 kg net
	<b>Biresin® U5 (B)</b>	250 kg; 20 kg; 5 kg net

## Processing

- Component A must be stirred thoroughly before use.
- The material and processing temperature must be 18 - 25°C, mould temperature at least 20°C.
- For processing a two-component dosage mixing machine is necessary which conforms to reactivity of resin system and volume of casting parts. A static-dynamic mixing unit is recommended.
- Machine vessel for component A must have a mixing unit and heating.
- Machine vessel for component B must be moisture tight, e. g. by installation of a silicagel filter.
- The resin and hardener components are to be mixed thoroughly and poured immediately into previously released moulds (e.g. with Sika® Liquid Wax-815 resp. Sika® Pasty Wax-818; for more information see product data sheet).

## Storage

- Minimum shelf life is 12 month under room conditions (18 - 25°C), when stored in original un-opened containers.
- After prolonged storage at low temperature, crystallisation of components may occur. This is easily removed by warming up for a sufficient time to a maximum of 70°C. Allow to cool to room temperature before use.
- Containers must be closed tightly immediately after use to prevent moisture ingress. The residual material needs to be used up as soon as possible.

## Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety related data.

## Disposal considerations

Product Recommendations: Must be disposed of in a special waste disposal unit in accordance with the corresponding regulations.

Packaging Recommendations: Completely emptied packagings can be given for recycling. Packaging that cannot be cleaned should be disposed of as product waste.

## Value Bases

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## 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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