

## PRODUCT DATA SHEET

# SikaBiresin® F150 (RockCast-150)

UNFILLED FASTCAST RESIN FOR PRODUCTION OF CLIMBING HOLDS – POT LIFE 2 – 3`

## APPLICATIONS

- Production of wear resistant and impact resistant climbing holds

## MAIN PROPERTIES

- High abrasion resistance
- High impact resistance
- Quick setting
- Easy processing
- Can be easily pigmented with SikaBiresin® Colour Paste

## DESCRIPTION

Basis	Two component polyurethane system
Component A	<b>SikaBiresin® F150</b> , polyol, unfilled, off-white
Component B	<b>SikaBiresin® F150</b> , MDI-based isocyanate, unfilled, yellowish

## PHYSICAL PROPERTIES

		Polyol (A)	Isocyanate (B)
Components		<b>SikaBiresin® F150</b>	<b>SikaBiresin® F150</b>
Viscosity, 25 °C	mPa.s	~ 450	~ 500
Density, 25 °C	g/cm <sup>3</sup>	1.05	1.21
Mixing ratio A:B	in parts by weight	100	100
		Mixture	
Colour		Off-white	
Viscosity, 25 °C	mPa.s	~ 500	
Pot life, 25 °C, 100 g	min	2 – 3	
Demoulding time, room temperature	min	~ 20	

## MECHANICAL PROPERTIES

approx. values; values after post curing 16 h / 70 °C

Density, 23 °C	ISO 2781	g/cm <sup>3</sup>	1.18
Shore hardness	ISO 868	-	D 80
Flexural modulus	ISO 178	MPa	1,700
Flexural strength	ISO 178	MPa	65
Elongation at break	ISO 527	%	50
Tensile modulus	ISO 527	MPa	1,550
Tensile strength	ISO 527	MPa	40
Impact resistance	ISO 179	kJ/m <sup>2</sup>	70
Abrasion resistance	ISO 4649	mm <sup>3</sup>	375

## THERMAL AND SPECIFIC PROPERTIES

approx. values; values after post curing 16 h / 70 °C

Glass transition temperature	ISO 11359	°C	75
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## PACKAGING UNITS

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|--|----------------|
| ■ Polyol (A), <b>SikaBiresin® F150</b>     | 200 kg / 20 kg |
| ■ Isocyanate (B), <b>SikaBiresin® F150</b> | 225 kg / 20 kg |

## PROCESSING DATA

- The material, processing and mould temperature should be at least 18 – 25 °C.
- Pay attention to dry conditions and dry mould surfaces while processing.
- If mould surface is porous it must be sealed prior applying release agent
- Silicone elastomer ESSIL 222 is recommended as mold to cast SikaBiresin® F150.
- If using other molds than silicones recommended release agents are wax based. For more information and recommendation see Product Data Sheets of Sika release agents or contact local technical assistance.
- To pigment in various colors SikaBiresin® Colour Paste are highly effective and please refer to their specific Product Data Sheet for proper handling.
- Both components must be shaken or stirred well before use.
- Both components have to be mixed thoroughly with a spatula or low-rpm stirrer according to mixing ratio and poured immediately into the mould starting from the deepest point.
- Further post curing of the demoulded part can improve the final mechanical properties.
- Depending on the geometry and weight of the part, it is recommended to use a conformer while post curing.
- For cleaning the final part from release agent residues, we recommend Sika® Reinigungsmittel-5. Before use of other cleaners, compatibility must be tested.

## STORAGE CONDITIONS

Shelf life	■ Polyol (A), <b>SikaBiresin® F150</b>	12 months
	■ Isocyanate (B), <b>SikaBiresin® F150</b>	9 months
Storage temperature	■ Polyol (A), <b>SikaBiresin® F150</b>	15 – 25 °C
	■ Isocyanate (B), <b>SikaBiresin® F150</b>	15 – 25 °C
Crystallization	■ After prolonged storage at low temperature crystallization of Isocyanate (B) may occur.	
	■ This is easily removed by warming up for enough time to a maximum of 60 °C.	
	■ Allow to cool to requested processing temperature before use.	
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.

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