

Biresin® CR131

Composite resin system

Areas of Application

- For infusion or injection processing
- Specially for applications when higher temperature resistance is required

Product Benefits

- Fast infiltration of dry fabrics and nonwovens is possible due to low mixed viscosity
- Glass transition temperatures up to 140°C dependent on curing conditions

Description

- Basis Two-component-epoxy-system
- Resin (A) **Biresin® CR131**, epoxy resin, translucent
- Hardener (B) **Biresin® CH135-4**, amine, colourless-transparent
- Hardener (B) **Biresin® CH132-5**, amine, blue
- Hardener (B) **Biresin® CH132-7**, amine, blue

Physical Data		Resin (A)		Hardener (B)	
Individual Components		Biresin® CR131	Biresin® CH135-4	Biresin® CH132-5	Biresin® CH132-7
Viscosity, 25°C	mPas	2,000	20	50	40
Density, 25°C	g/ml	1.16	0.92	0.93	0.95
Mixing ratio	in parts by weight	100	26	28	32
		Mixture			
Potlife, 100 g / RT, approx. values	min		160	140	260
Mixed viscosity, 25°C, approx. values	mPas		540	410	540

Mechanical Data, neat resin specimen: approx. values after 8 h / 125°C

Biresin® CR131 resin (A)		with hardener (B) Biresin®	CH135-4	CH132-5	CH132-7
Density	ISO 1183	g/cm³	1.15	1.15	1.16
Flexural E-Modulus	ISO 178	MPa	2,900	2,750	2,800
Flexural strength	ISO 178	MPa	133	124	120
Compressive strength	ISO 604	MPa	120	116	110
Tensile E-Modulus	ISO 527	MPa	2,750	2,700	2,700
Tensile strength	ISO 527	MPa	89	86	84
Elongation at break	ISO 527	%	5.7	5.9	6.7
Impact resistance	ISO 179	kJ/m²	27	46	37

Processing

- The material and processing temperatures should be from 18 to 35°C.
- Before demoulding precuring of at least 2 h at 60°C is recommended.
- To clean brushes or tools immediately Sika Reinigungsmittel 5 is recommended.
- Additional informations are available in "Processing Instructions for Composite Resins".



Thermal Data, neat resin specimen: approx. values after 8 h / 125°C

Biresin® CR131 resin (A)	with hardener (B) Biresin®	CH135-4	CH132-5	CH132-7
Heat distortion temperature	ISO 75B °C	137	135	124
	ISO 75C °C	119	118	105
Glass transition temperature	ISO 11357 °C	138	136	127

Packaging

Individual components	Biresin® CR131 resin (A)	1,000 kg; 200 kg; 10 kg net
	Biresin® CH135-4 hardener (B)	850 kg; 180 kg; 26 kg; 3 kg net
	Biresin® CH132-5 hardener (B)	900 kg; 180 kg; 2.8 kg net
	Biresin® CH132-7 hardener (B)	180 kg; 3.2 kg net

Storage

- Minimum shelf life of Biresin® CR131 resin (A) is 24 month and of Biresin® CH135-4 hardener (B), CH132-5 hardener (B) and CH132-7 hardener (B) is 12 month under room conditions (18 - 25°C), when stored in original unopened containers.
- After prolonged storage at low temperature, crystallisation of resin may occur. This is easily removed by warming up for a sufficient time to 50-60°C.
- Containers must be closed tightly immediately after use. 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 safetyrelated 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.



Further information available at:

Sika Deutschland GmbH
Subsidiary Bad Urach
Stuttgarter Str. 139
D - 72574 Bad Urach
Germany

Tel: +49 (0) 7125 940 492
Fax: +49 (0) 7125 940 401
Email: tooling@de.sika.com
Internet: www.sika.com

