

Biresin® CR122 with Biresin® CH122-9 hardener

Composite resin system

Areas of Application

- For wet lay-up, pultrusion and filament winding processing
- Specially for applications when higher temperature resistance is required
- **Biresin® CR122** with **Biresin® CH122-9** approved by Luftfahrt-Bundesamt (German Aeronautics Federal Office) as resin system for GRP-, CRP- and SRP parts for glider and power glider

Product Benefits

- Because of optimized mixed viscosity good impregnation and good non draining properties

Description

- Basis Two-component-epoxy-system
- Resin (A) **Biresin® CR122**, epoxy resin, translucent
- Hardener (B) **Biresin® CH122-9**, amine, colourless to brownish (also available in blue)

Physical Data		Resin (A)	Hardener (B)
Individual Components		Biresin® CR122	Biresin® CH122-9
Viscosity, 25°C	mPas	850	120
Density, 25°C	g/ml	1.17	0.94
Mixing ratio	in parts by weight	100	40
		Mixture	
Potlife, 100 g / RT, approx. values	min	330	
Mixed viscosity, 25°C, approx. values	mPas	680	

Mechanical Data, neat resin specimen: approx. values				
Biresin® CR122 resin (A)			with Biresin® CH122-9 hardener (B)	
Curing Conditions	Time / Temperature		8 h / 100°C	12 h / 55°C
Density	ISO 1183	g/cm³	1.14	1.15
Shore hardness	ISO 868	-	D 86	D 86
Flexural E-Modulus	ISO 178	MPa	2,600	3,050
Tensile E-Modulus	ISO 527	MPa	2,600	2,800
Flexural strength	ISO 178	MPa	119	120
Compressive strength	ISO 604	MPa	114	103
Tensile strength	ISO 527	MPa	87	84
Elongation at break	ISO 527	%	6.9	5.3
Impact resistance	ISO 179	kJ/m²	44	81



Processing

- The material and processing temperatures should be from 18 to 35°C.
 - Postcuring is recommended:
 - for achieving of LBA-RHV minimum requirements with **Biresin® CH122-9**:
carbon / glass fibre: 12 h / RT plus 12 h / 65°C
- With that curing conditions the system achieves the requirements for glider and power glider (temperature range of use -60 up to +54°C)
- To clean brushes or tools immediately Sika Reinigungsmittel 5 is recommended.
 - Additional informations are available in "Processing Instructions for Composite Resins".

Thermal data of neat resin specimen

Biresin® CR122 resin (A)			with Biresin® CH122-9 hardener (B)	
Heat distortion temperature	ISO 75A	°C	114*	
	ISO 75B	°C	119*	
	ISO 75C	°C	101*	
Glass transition temperature	ISO 11357	°C	120*	

* values after post curing: 8 h / 100°C

Packaging

Individual components	Biresin® CR122 resin (A)	1000 kg; 200 kg; 30 kg; 10 kg net
	Biresin® CH122-9 hardener (blue) (B)	180 kg; 20 kg; 4 kg net

Storage

- Minimum shelf life of Biresin® CR122 resin (A) is 24 month and of Biresin® CH122-9 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 a maximum of 80°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 and storage of products, users should refer to the current Safety Data Sheet 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

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Ihr Zeichen:

Ihre Nachricht vom: 22.12.2011

Unser Zeichen: T 3-20500-FVK Sika 1/12

Unsere Nachricht vom:

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Datum: 17. Februar 2012

Harzsystem Sika Biresin® CR122 / CH122-9

Sehr geehrter Herr Giese,

nach Durchsicht der uns mit Datum vom 23. Dezember 2011 zugegangenen
Versuchsergebnisse erheben wir gegen die Verwendung des Harz-Härter-Systems

Sika Biresin® CR122 / CH122-9

bei der Herstellung von Segelflugzeugen und Motorseglern in GfK-, CfK-Bauweise keine
Einwände, wenn der Verwender anhand der technischen Unterlagen feststellt, dass dieses
Laminierharzsystem für seinen Anwendungsfall und seine Fertigungseinrichtungen geeignet
ist.

Die Listen der LBA-anerkannten Harz-Härter-Systeme haben wir entsprechend ergänzt.
Über eventuell auftretende Probleme bei der Verwendung der Harz-Härter-Systeme sind wir
umgehend zu informieren.

Mit freundlichen Grüßen

Im Auftrag

Fendt

- Anlage

2 Listen LBA-anerkannter Harz-Härter-Systeme