BUILDING TRUST

PRODUCT DATA SHEET

SikaBiresin® SI222

POLYADDITION SILICONE SYSTEM FOR MOLD MAKING APPLICATIONS

APPLICATIONS

- Especially appropriate for all the models with undercuts
- Suitable for casting standard resins
- Art ceramic
- Sanitary ware
- Artificial stone
- Concrete molding

MAIN PROPERTIES

- Vulcanized by polyaddition
- Very good flowing
- Fast and non-shrink curing
- Low shore hardness
- High tear strength
- Excellent long-term stability of the mechanical characteristics of the hardened rubber

DESCRIPTION

Basis	Two component silicone system
Component A	**SikaBiresin® SI222**, resin, white
Component B	**SikaBiresin® SI222**, catalyst, white

PHYSICAL PROPERTIES

			Resin (A)	Catalyst (B)
Component			**SikaBiresin® SI222**	**SikaBiresin® SI222**
Density, 23 °C	kg/l		1.13	1.13
Mixing ratio	by weight		100	100
			Mixture	
Colour			White	
Viscosity	mPa.s	BROOKFIELD LVT	4,500	
Pot life, 23 °C	min		15	
Setting time, 23 °C	min		90	

MECHANICAL PROPERTIES

(approx. values after 24 hours / 23 °C)

Density	ISO 2781	kg/l	1.13
Shore hardness	ASTM D2240	A	22
Tensile strength	ASTM D412	N/mm^2	4.9
Elongation at break	ASTM D412	%	480
Tear strength	ASTM D624	N/mm	20

PACKAGING UNITS

■ Resin (A), **SikaBiresin® SI222**	5 kg
■ Catalyst (B), **SikaBiresin® SI222**	5 kg

PROCESSING DATA

- The material and processing temperature must be at least 18 °C – 25 °C.
- Select a smooth-walled container that has 5 times the volume of the mixture to be processed.
- Make sure the mold or master model is clean, dry, dust and grease free.
- Prior to mixing, both components must be shaken thoroughly.
- Both components must be mixed thoroughly respecting the defined mixing ratio with a spatula or low-rpm stirrer.
- To avoid bubbles the mixture must be degassed under vacuum.
- Do not forget to scrape the bottom and side of the container with a spatula and mix again. Once the product is thoroughly mixed, it is ready to be casted and it is recommended to pour the silicone from a 30 cm height into the mold.
- Leave it cure at room temperature or after bubble-free casting the curing time can be shortened by heating at maximum 40 °C. Higher shrinkage and hardness must be expected here.
- Polyaddition-curing silicone elastomers show a high sensitivity to certain substances, which inhibit the hardening of the material.
- The following substances can cause inhibition: amines, polyurethanes, epoxies another nitrogenous substances, polysulfones, polysulfides, natural and synthetic rubber and other sulfurous substances, organometallic compounds, vulcanizates and (tin-catalyzed) hardeners of condensation-curing silicones. The effect of this irreversible inhibition is a sticky silicone mass.
- Check the compatibility of the model material and silicone.
- Containers must be closed tightly immediately after use.
- Once opened the product shall be used up as soon as possible.

STORAGE CONDITIONS

Shelf life	■ Resin (A), **SikaBiresin® SI222**	18 months
	■ Catalyst (B), **SikaBiresin® SI222**	18 months
Storage temperature	■ Resin (A), **SikaBiresin® SI222**	5 °C – 27 °C
	■ Catalyst (B), **SikaBiresin® SI222**	5 °C – 27 °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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