

PRODUCT DATA SHEET

SikaBiresin® SI222

Polyaddition-cure silicone system for mold making applications

TYPICAL PRODUCT DATA (FURTHER VALUES SEE SAFETY DATA SHEET)

Properties	SikaBiresin® SI222 (A)	SikaBiresin® SI222 (B)
Chemical base	2-component silicone	
Cure mechanism	Polyaddition	
Color	White	White
	mixed	White
Density	1.13 kg/l	1.13 kg/l
	cured	1.13 kg/l
Mixing ratio	by weight	100 : 100
Viscosity (by Brookfield)	4500 mPa·s	4500 mPa·s
	mixed	4500 mPa·s
Pot life (CQP021-4)	at 23 °C	15 minutes
Curing time	at 23 °C	90 minutes
Shore A hardness (ASTM D2240)	22 ^A	
Tensile strength (ASTM D412)	4.9 N/mm ² ^A	
Tear strength (ASTM D624)	20 N/mm ^A	
Elongation at break (ASTM D412)	480 % ^A	
Shelf life	18 months	

CQP = Corporate Quality Procedure

^A) curing condition: 23 °C for 24 hours

DESCRIPTION

SikaBiresin® SI222 is a polyaddition-cure silicone system for mold making applications with high flexibility and very good flow behavior.

PRODUCT BENEFITS

- Long-term mechanical stability of the hardened rubber
- Low shore hardness
- High tear strength
- Very good flow behavior
- Fast and low-shrink curing

AREAS OF APPLICATION

SikaBiresin® SI222 is particularly well suited for models with undercuts.

The material is also designed for applications in art ceramics and the manufacture of sanitary ware components.

The Product can also be used in artificial stone applications and is suitable for concrete molding.

This product is suitable for experienced professional users only. Tests under actual processing conditions and with additional materials such as coatings and release agents must be performed to proof material compatibility.

METHOD OF APPLICATION

Surface preparation

The material and processing temperature shall be between 18 °C and 25 °C. Make sure the mold or master model is clean, dry, dust and grease free.

Mixing process

Use a smooth-walled container of adequate size. For vacuum degassing, the container volume shall be at least 5 times the volume of the mixture. Both components must be mixed thoroughly respecting the defined mixing ratio. The mixing can be performed with a spatula or a machine stirrer at ≤ 300 rpm. 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 for casting; however, for bubble-free castings, the mixture shall be degassed. Note: Both containers must be closed tightly immediately after use. Once opened the Product shall be used up as soon as possible.

Application

Leave it to cure at room temperature. After bubble-free casting the curing time can be shortened by heating to a maximum temperature of 40 °C. If heat cured, higher shrinkage and hardness must be expected. Polyaddition-curing silicone elastomers show a high sensitivity to certain substances, which inhibit the proper hardening of the material.

The following substances are critical: 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. Always check the compatibility of the model material and the silicone.

STORAGE CONDITIONS

Both components must be stored at temperature between 15 °C and 25 °C in original unopened containers.

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 Industry. Copies of the following publications are available on request:

- Safety Data Sheets

PACKAGING INFORMATION

SikaBiresin® SI222 (A)

Canister	5 kg
----------	------

SikaBiresin® SI222 (B)

Canister	5 kg
----------	------

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.

DISCLAIMER

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.

