

NEUKASIL RTV 1701

Silicone Rubber
condensation-crosslinking

altropol

Main features

- high resistance to initial tearing and tear propagation
- good flowing properties
- can be made thixotropic

Applications

- mould making, artistic casting
- suitable for polyester, epoxied, wax
- concrete cast

Properties in the non-crosslinked state (approx. values)

				NEUKASIL RTV 1701 comp. A	NEUKASIL RTV 1701 comp. B
Colour				white	colourless
Density 20 °C	g/cm ³			1.10	0,95
Viscosity 20°C	mPas			37,000	15

Properties of the mixture (approx. values)

Mixing ratio	p.b.w.			100	5
Mixed viscosity	mPas				20,000
Pot life	(1000g) Minuten				60 - 120
tack-free	Stunden				12 - 24
Hardness (24h)	Shore A				17
Hardness (7d)	Shore A				22
Service temperature	°C				200
Tensile strength	N/mm ²				3.4
Elongation at break	%				1,180
Resistance to tear propagation	N/mm ²				17

How to process the material

For the crosslinking of NEUKASIL RTV 1701 serve the crosslinker NEUKASIL RTV 1701 comp.B. The mixing ratio on 100 parts by weight of NEUKASIL RTV 1701 comp.A is 5 parts by weight of crosslinker NEUKASIL RTV 1701 comp.B. For the preparation of a formulation being ready for processing, add the required quantity of crosslinker to the rubber and stir the compound until it is homogeneous. See that as little air as possible gets into the compound while stirring. To obtain a bubble-free vulcanized material, we recommend evacuating the crosslinker-containing formulation before continuing the processing.

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When the vacuum is created, the mixture increases in volume by 3 to 4 times of its original volume under formation of bubbles. The degassing process is finished when the bubbles have collapsed and the formulation has reobtained its original volume. Avoid a longer stay of the crosslinker-containing formulation in the vacuum as otherwise you run the risk that parts of the crosslinkers will be removed. Carefully cast the prepared material without enclosing bigger quantities of air again.

Release agents

When NEUKASIL RTV 1701 is used as mould making material (production of negatives), there is no release agent required for demoulding. Should there still arise any problems, we recommend our NEUKADUR Release Agent N or NEUKADUR Release Spray P 6. For the production of multipart moulds and to avoid an adhesion of NEUKASIL RTV 1701 to itself, use the same release agents. Treat the surface of the part already vulcanized with release agent, then cast the second part of the mould.

Thixotropic adjustment

By addition of the thixotropic agent RTV 1701 comp. C, the silicone rubber can be made thixotropic for special applications, i. e. the compound is then no longer liquid and castable, but pasty, brushable. For this, add approx. 0.5 to 1.0 % of the RTV 1701 comp. C to the components RTV 1701 comp. A and B already mixed. The thixotropic effect already occurs after a short period of time.

Form of delivery

NEUKASIL RTV 1701 comp. A	1; 5 ; 25 and 200 kg
NEUKASIL RTV 1701 comp. B	0.05 ; 0,25 ; 1.25 and 10 kg
NEUKASIL RTV 1701 comp. C	0.01; 0.05 ; 0.25 and 2.5 kg

Storage

The material should be kept in tightly closed original receptacles at temperatures of 15 - 25 °C. When duly stored, the materials can be used within the shelf life indicated on the labels. If stored for a longer period of time, the crosslinkers produce a slight sediment in the receptacle which does however not affect the usability.

Measure of precaution

Users should make use of the current safety data sheets, which contain physical, ecological, toxicological and other data relating to safety, to inform themselves on the safe handling and storage of the products.

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Our technical service – in words, in writing or by trials – is given according to the current state of our knowledge. It does however not relieve you from the duty to check by yourselves if the products supplied by us are suitable for the intended processes and purposes. Application, use and processing of the products take place beyond our control possibilities and lie therefore exclusively in the area of responsibility of the processor. Any existing property rights of third parties are to be considered. We guarantee the perfect quality of our products in accordance with our general terms and conditions of business. When handling our products, you have to observe the legal rules and the rules for the industrial hygiene. As for the rest, we refer to the corresponding safety data sheets. State: 2012-02-09