

NEUKASIL SN 2942

Silicone Rubber
addition-crosslinking

altropol

Main features

- very good flow properties
- high Shore A-hardness
- medium-viscous

Applications

- production of finished parts

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

| | | NEUKASIL SN 2942 | NEUKASIL Crosslinker 930 |
|------------------|-------------------|---------------------|-----------------------------|
| Colour | | white | colourless |
| Mixing ratio | p.b.w. | 100 | 15 |
| Density (20 °C) | g/cm ³ | 1.20 | 1.0 |
| Viscosity (20°C) | mPa·s | 18.000 | 100 |

Properties of the mixture (approx. values)

| | | | |
|------------------------------|---------|-----------|-------|
| Mixed viscosity | mPa·s | | 8,000 |
| Pot life (1000 g) | minutes | | 20 |
| Curing time (RT) * | hours | | 24 |
| Hardness (24h) | Shore A | DIN 53505 | 92 |
| Hardness (final hardness) | Shore A | DIN 53505 | 95 |
| Service temperature, briefly | °C | | 200 |

Mechanical values of the cured product (approx. values)

| | | | |
|--------------------------------|------|--------------|-----|
| Tensile strength | MPa | DIN 53504 | 4.5 |
| Elongation at tear | % | DIN 53504 | 30 |
| Resistance to tear propagation | N/mm | ASTM D 624 B | 2.5 |
| Linear dimensional change | % | | 0.1 |

* The vulcanization is temperature-dependent and is accelerated considerably by heat supply. (RT = room temperature)

Important: The platinum catalyst is in NEUKASIL SN 2942.

How to process the material

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. When the vacuum is created, the mixture may increase in volume by 3 – 4 times of its original volume under formation of bubbles. The process is finished when the bubbles have collapsed and the formulation has reobtained its original volume. Carefully pour the prepared material over the object to be cast.

Whenever working with addition-crosslinking silicone rubbers, see that the receptacles used are clean and dry. Furthermore, the surface of the object to be cast should be dry and free from dirt.

Release Agent

Depending on the kind and nature of the moulding material, we recommend the use of a release agent, e. g. NEUKADUR Release Agent SE NEW.

For release agents, please visit our homepage under <http://www.altropol.de/en/produkte/weitere-produkte/trennmittel>

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Compatibility with other materials

NEUKASIL SN 2942 is well compatible with all common pattern materials such as wood, plaster, metals and plastic materials and provides perfect casts.

Certain substances inhibit or decelerate the vulcanization of NEUKASIL SN 2942 which can be noticed by tacky surfaces or surfaces containing bubbles. To these substances belong among other things condensation-crosslinking silicones, organic rubbers, plasticizers, amines, heavy-metal compounds and sulphurous substances. High air humidity and water may also lead to disturbances. Under unfavourable circumstances, it may happen that also surfaces having been in contact with the mentioned substances lead to vulcanization faults. The same applies to certain modelling materials. In case of doubt, we recommend carrying out pretrials on a small scale.

Vulcanization

By vulcanization or cross-linking one understands the transition from liquid, castable silicone rubber to the tack-free, rubbery-elastic state. It begins after addition of the crosslinker, and there are no cleavage products whatsoever produced during this process. At 20 – 25 °C, the vulcanization is terminated to a large extent after 24 hours. The vulcanization speed is temperature-dependent and can be accelerated considerably by heat supply.

NEUKASIL RTV (SN) is the designation for 2-component silicone rubber systems of the ALTROPOL KUNSTSTOFF GmbH vulcanizing at room temperature.

Form of delivery

| | | | |
|--------------------------|----------|---------|---------|
| NEUKASIL SN 2942 | 1 kg | 5 kg | 25 kg |
| NEUKASIL Crosslinker 930 | 0.150 kg | 0.75 kg | 3.75 kg |

Storage

We recommend keeping the material in tightly closed original receptacles at temperatures of 20 - 25 °C. When duly stored, the material can be used within the shelf life indicated on the labels (the first 2 digits of the batch number indicate the week, the 3rd digit indicates the year).

Measure of precaution

With the aid of the current safety data sheets, which contain physical, ecological, toxicological and other data relating to safety, the user can inform himself on the safe handling and storage of the product.

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 the customer/ user from the duty to check by himself 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.

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