

Novasil®

AS-SP 7699

Technical Datasheet

Characteristics:

- Gel
- RTV-2 silicone, addition curing
- Quick gelatinisation at a moderate temperature
- Crystal clear
- Extremely low viscosity for flowing around the finest components
- Protects sensitive components from thermo-mechanically-induced stresses

Fields of application:

- Crystal-clear potting

Important information:Compatibility with other materials:

Prior to use, the user must ensure that materials that come into contact with the product are compatible with it and will not damage or change it (e.g. discolouration). This includes gaseous substances that can be released by materials in the immediate vicinity (e.g. sulphurous compounds, amines, etc.) For example, processing condensation-curing products in the direct vicinity may disrupt the product curing. The platinum catalyst can be inhibited in the event of contact with organometallic compounds (especially organic tin compounds), as well as with amine, sulphur and phosphorous compounds. The user may need to contact the respective material manufacturer. It is recommended to check the compatibility in the application and in the planned production environment in advance. Keep the product away from moisture.

Usual temperature range

Addition-curing silicones are typically usable over a temperature range of -45 to +200 °C for long periods of time. The interaction of factors such as the frequency of temperature changes, the heating rate, the air intake, etc. causes a complex time- and temperature-dependent thermal behaviour. Therefore, the behaviour at both the lower and upper end of the temperature spectrum should be tested close to the application in order to check the individual suitability in the application.

Batch binding:

Both components are delivered in coordination with each other. The listed technical details can only be guaranteed if the corresponding components are processed together. The batch numbers of each corresponding batch can be found on the container labels.

Mixing:

Even the smallest amounts of the catalyst can lead to curing in the crosslinker component. That is why work must be done with the utmost level of cleanliness to avoid a cross-contamination of the components. Tools for processing the catalyst (spatula, cup, etc.) must not come into contact with the crosslinker.

To avoid the inclusion of air or bubbles, it is recommended to evacuate the materials prior to working with them or to apply the materials with a vacuum.

Curing:

The curing times of addition-curing silicones are very dependent on the temperature and the design of the component to be potted. Increased temperatures lead to an exponential increase in the curing speed.

Technical properties:**Single components:****Novasil®AS-SP 7699 A(SiH crosslinker)**

| | |
|---|-----------------------------|
| Comment | contains an SiH crosslinker |
| Colour | crystal clear |
| Viscosity (rheometer CP25, 0.5 1/s) [mPas] | ~ 480 |
| Viscosity mixture (rheometer CP25, 50 1/s) [mPas] | ~ 480 |

Ottocure AS-CA 5040(platinum catalyst)

| | |
|---|------------------------------|
| Comment | contains a platinum catalyst |
| Colour | crystal clear |
| Viscosity (rheometer CP25, 0.5 1/s) [mPas] | ~ 890 |
| Viscosity mixture (rheometer CP25, 50 1/s) [mPas] | ~ 890 |

Mixed compound

Novasil® AS-SP 7699 A + Ottocure AS-CA 5040

| | |
|--|---------------|
| Colour | crystal clear |
| Viscosity mixture (rheometer CP25, 0.5 1/s) [mPas] | ~ 690 |
| Viscosity mixture (rheometer CP25, 50 1/s) [mPas] | ~ 690 |
| Mixing ratio according to weight (A:B) | 1 : 1 |
| Density at + 23 °C [g/cm ³] | ~ 0,98 |

Vulcanisate:

| | |
|---|-----------------------|
| Dielectric strength according to IEC 60243-1:2013; 23 °C [kV/mm] | ~ 21 |
| Volume resistance ρ according to IEC 62631-3-1:2016 [$\Omega \cdot \text{cm}$] | ~ $3,5 \cdot 10^{14}$ |

These data are not suitable for the issue of specifications. Please contact OTTO-CHEMIE before issuing specifications.

Reactivity:

| | T = +23 °C | T = +60 °C | T = +100 °C |
|---------------|------------|------------|-------------|
| Pot life* 7 h | | 15 min | 5 min |

* The values are subject to a natural fluctuation range of $\pm 10\%$ due to the method used.

Pretreatment:

The adherent surfaces have to be clean, free from fat, dry and sustainable.

Application information:

Due to the many possible influences during and after application, the customer always has to carry out trials first.

Packaging:

Packagings on request

Safety precautions:

Please observe the material safety data sheet.

Disposal:

Information about disposal: Please refer to the material safety data sheet.

Warranty information:

All information in this publication is based on our current technical knowledge and experience. However, since conditions and methods of use and application of our products are beyond our control, we suggest that you test the product before final use. Information given in this technical data sheet and explanations of OTTO-CHEMIE in connection with this technical data sheet (e.g. service description, reference to DIN regulations etc.) is not to be seen as a warranty. Warranties require a separate written declaration of OTTO-CHEMIE to prove their validity. The characteristics stated in this data sheet define the characteristics of the article broadly and conclusively. Suggestions of use are not to be taken as confirmation of the appropriateness for the recommended intended use. We reserve the right to alter the product, adjusting it according to technical progress and new developments. We are at your disposal both for inquiries as well as specific application problems. If a governmental approval or clearance is

necessary for the application of our products, the user is responsible for the obtainment of such. Our recommendations do not excuse the user from the obligation to take into consideration the possibility of infringement of third parties' rights and - if necessary - resolving it. For the rest our general terms and conditions apply, in particular regarding a possible liability for defects. You can find our general terms and conditions on our homepage: <http://www.otto-chemie.de/en/terms-and-conditions>

