

Novasil®

S 803

Technical Datasheet

Characteristics:

- Neutral curing 1-component silicone filling compound based on alkoxy
- Self-levelling
- Cures at room temperature
- Excellent adhesion on many substrates, partly in combination with primer
- With UV-indicator (for the quality control/inspection of the application via UV light)

Fields of application:

Lighting and electronics industry:

- Potting and coating of electronic and electric components

Standards and tests:

- UL FLAME CLASSIFICATION 94 HB, RTI 105°C, File No. E176319
- UL Dielectric Strength, File No. E176319
- UL Volume Resistivity, File No. E176319

Important information:

Before applying this product the user has to ensure that the materials in the area of contact (solid, liquid and gaseous) are compatible with it and also amongst each other and do not damage or alter (e. g. discolour) each other. As for the materials that will be used at a later stage in the surrounding area of the product the user has to clarify beforehand that the substances of content or evaporations do not lead to an impairment or alteration (e. g. discolouration) of the product. In case of doubt the user should consult the respective manufacturer of the material.

During curing small amounts of alcohol are released.

Ensure good ventilation during application and curing.

Paints, lacquers, plastics and any other coatings must be compatible to the adhesive/sealant.

The required vulcanization time prolongs with increasing thickness of the silicone layer. One-component silicones must not be used for full-surface bonding applications unless special constructional prerequisites are met. If one-component silicones are to be used for thickness layers of more than 15 mm please contact our technical department beforehand.

Contact with chemicals and when used in light protected applications can lead to a slight yellowing of the cured product. A possible change in colour does not necessarily influence the functionality.

Technical properties:

Skin-forming time at 23 °C/50 % RH [minutes]	~ 15
Curing in 24 hours at 23 °C/50 % RH [mm]	~ 2
Processing temperature from/to [°C]	+ 5 / + 40
Viscosity Brookfield [mPas]	~ 25000
Density at 23 °C according to ISO 1183-1 [g/cm³]	~ 1,0
Shore-A-hardness according to ISO 868	~ 15
Stress expansion modulus at 100 % according to ISO 37, S3A [N/mm²]	~ 0,3
Tensile expansion according to ISO 37, S3A [%]	~ 250
Tensile strength according to ISO 37, S3A [N/mm²]	~ 0,7
Temperature resistance from/to [°C]	- 40 / + 200 (1)
Dielectric strength ED according to DIN EN 60243-1 [kV/mm]	17
Volume resistance ρ according to IEC 62631-3-1:2016 [Ω *cm]	1 * 10 ¹²
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	12 (2)
Shelf life at 23 °C/50 % RH for pail/drum [months]	12 (2)

- 1) After complete curing a temperature resistance up to approx. +200°C can be reached. Constant use under high temperatures and /or high humidity (RH > 60%) may change the properties of the material or lead to an interaction with neighbouring materials.
- 2) from date of manufacture

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

Pretreatment:

All adherent surfaces must be clean and any contaminant such as release agents, preserving agents, grease, oil, dust, water, old adhesives or sealants and other substances which could affect adhesion, must be removed. Cleaning of non-porous substrates: Apply OTTO Cleaner T (airing time approx. 1 minute) using a clean, lint-free cotton cloth.
The adherent surfaces have to be clean, free from dust and grease as well as sustainable. The demands on elastic sealings and bondings depend on the respective exterior influences. Extreme fluctuations in temperature, tensile or shear forces, repeated contact with water etc. demand high requirements of a bonding. In such cases it is advisable to apply primer in order to achieve a resilient bonding. Please consult our technical department.

Application information:

Due to the many possible influences during and after application, the customer always has to carry out trials first.
We recommend to store our products in unopened original packaging dry (< 60 % RH) at temperatures of +15 °C up to +25 °C. If the products are stored and / or transported at higher temperatures / air humidity for longer periods (some weeks), a diminution of durability or a change of material characteristics may arise.

Packaging:

	310 ml cartridge
transparent	S803-04-C00
Packaging unit	20
Pieces per pallet	1200

Safety precautions:

Please observe the material safety data sheet.
After curing the product is completely odourless.

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>