

# Novasil®

## S 800

### Technical Datasheet

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**Characteristics:**

- Neutral curing 1-component silicone adhesive/sealant based on alkoxy
- Excellent weathering, ageing and UV-resistance
- Excellent self-adhesion on plastics
- High adhesive power
- Non-corrosive
- Low odour
- Does not cause stress cracks in non-prestressed acrylic glass and polycarbonate

**Fields of application:****Renewable energies:**

- Elastic bonding of frames to PV-modules
- Adhesion and sealing of junction boxes

**Domestic appliances industry :**

- Bonding of door pillars, brackets and mouldings

**Lighting and electronics industry:**

- Elastic bonding and sealing of lamp casings
- Elastic bonding and sealing of electrical and electronic components

**Heating, ventilation and plant construction:**

- Sealing of connecting and expansion joints for air-conditioning and ventilation technology purposes

**General Industry:**

- Elastic bonding and sealing for industrial purposes with a permanent temperature of up to + 150 °C

**Standards and tests:**

- UL 94 Flame Classification HB, RTI 105 °C, File No. E 176319
- The product has been tested according to the criteria of the American Food and Drug Administration (FDA, 21 CFR 177.2600) and is suitable for repeated contact with non-fatty foods. Pre-requisite for an application as part of these regulations is the corresponding treatment of the vulcanizate such as by means of heat treatment in order to remove volatile and extractable parts before use.
- The compatibility with strainless Plexiglas® has been tested and confirmed by the manufacturer. Test report on the compatibility with Plexiglas®- XT is available.
- The compatibility with prestressed Makrolon® has been tested and confirmed by the manufacturer. Test report on the compatibility with Makrolon® is available.

**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.

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

During curing small amounts of alcohol are released.

Ensure good ventilation during application and curing.

The required vulcanization time prolongs with increasing thickness of the silicone layer. One-component silicones are not suitable for full-area bonding, unless there are specific structural conditions that require such full-area application. If one-component silicones are to be used for thickness layers of more than 15 mm please contact our technical department beforehand.

**Technical properties:**

|  |                  |
|--|------------------|
| Skin-forming time at 23 °C/50 % RH [minutes]                       | ~ 20             |
| Curing in 24 hours at 23 °C/50 % RH [mm]                           | ~ 2              |
| Processing temperature from/to [°C]                                | + 5 / + 40       |
| Density at 23 °C according to ISO 1183-1 [g/cm³]                   | ~ 1,4            |
| Viscosity at 23 °C   | pasty, stable    |
| Shore-A-hardness according to ISO 868                              | ~ 45             |
| Stress expansion modulus at 100 % according to ISO 37, S3A [N/mm²] | ~ 1,0            |
| Tensile expansion according to ISO 37, S3A [%]                     | ~ 480            |
| Tensile strength according to ISO 37, S3A [N/mm²]                  | ~ 3,0            |
| Temperature resistance from/to [°C]                                | - 40 / + 180 (1) |
| Dielectric strength ED according to DIN EN 60243 [kV/mm]           | ≥ 15             |
| Volume resistance p according to DIN IEC 93 [Ω*cm]                 | 10 ^14           |
| Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]        | 9 (2)            |

1) Refers to the colour black, all other colours resistant up to +150°C or, over the short term (up to 500 h), up to 180° C.

2) from date of manufacture

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

**Pretreatment:**

The adhesive surfaces must be cleaned and any contamination such as release agents, preservatives, grease, oil, dust, water, old adhesives/sealants and other substances impairing adhesion must be removed.

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

Certain plastics need a special surface treatment to achieve optimal adhesion on it. Please contact our technical department for this.

**Application information:**

Sensitive to smoothing agents. It is recommended to remove the product in a dry state, as smoothing agents may cause the surface to be tacky.

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

In order to achieve good adhesion and good mechanical properties air entrapment must be avoided.

Please observe the recommended shelf life which is printed on the packaging.

We recommend to store our products in unopened original packaging dry (< 60 % RH) at temperatures of +15 °C up to +25 °C. If S 800 is stored at temperatures above 30 °C for a longer period of time (several weeks) this will lead to a considerably shorter shelf life.

**Packaging:**

|                          |                  |
|--------------------------|------------------|
|                          | 310 ml cartridge |
| black                    | S800-04-C04      |
| white                    | S800-04-C01      |
| <b>Packaging unit</b>    | <b>20</b>        |
| <b>Pieces per pallet</b> | <b>1200</b>      |

Further delivery forms available on request

**Safety precautions:**

Please observe the material safety data sheet.

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

**Brand information:** Plexiglas® is a registered trademark of company Evonik-Röhm GmbH (Darmstadt)  
Makrolon® is a registered brand of the company Covestro Deutschland AG (Leverkusen)

**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>