

Novasil® S 802

The silicone for the elastic adhesion and sealing of acrylic glass and polycarbonate

S 802



Characteristics

- ▶ Neutral curing 1-component silicone adhesive/sealant based on alkoxy
- ▶ Adheres on almost all plastics without primer (except PR, PP, PTFE and similar plastics with a low surface tension)
- ▶ Does not cause stress cracks in non-prestressed acrylic glass and polycarbonate
- ▶ Low odour
- ▶ High resistance to notches, tension and tearing
- ▶ Non-corrosive
- ▶ Excellent weathering, ageing and UV-resistance

Fields of application

Lighting and electronics industry:

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

General Industry:

- ▶ Elastic bonding and sealing of acrylic glass and poly carbonate

Standards and tests

- ▶ UL FLAME CLASSIFICATION 94 HB, RTI 105°C, File No. E176319
- ▶ 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.



Technical properties

Colour	C00 transparent
Skin-forming time at 23 °C/50 % RH [minutes]	10 - 15
Curing in 24 hours at 23 °C/50 % RH [mm]	~ 2,5
Processing temperature from/to [°C]	+ 5 / + 40
Viscosity at 23 °C	pasty, stable
Density at 23 °C according to ISO 1183-1 [g/cm ³]	~ 1,0
Shore-A-hardness according to ISO 868	~ 20
Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm ²]	~ 0,3
Tensile expansion according to ISO 37, type 3 [%]	~ 500
Tensile strength according to ISO 37, type 3 [N/mm ²]	~ 1,0
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
Track resistance (CTI-value) according to UL 746 A (ASTM D3638) [V]	~ 600
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]	6 ²

1) In cases where the cured sealant is constantly exposed to very high temperatures, the vulcanised product may change colour and its surface may stay somewhat sticky.

2) from production

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

Pretreatment

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

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.

Clean sensitive plastics with OTTO Cleaner T or with a cleaner which has been recommended by the manufacturer of the plastic.

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

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.

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.

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.

Due to interaction with liquid or gaseous chemicals e.g. iodine, bromine or aldehyde containing substances, the silicone may discolour. It is advisable to carry out tests before usage!

Avoid contact with materials which contain bitumen and which release solvents, e. g. butyl, EPDM, neoprene, insulating- and bituminous paint.

In overlapping bonding/sealing of polycarbonate sheets, especially outdoors, discolouration of the sealant can not be excluded.

Application information

Due to the many possible influences during and after application, the customer always has to carry out trials first. Please observe the recommended shelf life which is printed on the packaging. We recommend to store our products in unopened original packagings 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	S802-04-C00
Pieces per packaging unit	20
Pieces per pallet	1200

Other packagings and colours on request

Due to typographical reasons the colours shown below may differ from the original colours of the products.

Safety precautions

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

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

The above information and our technical application advice, whether verbal, in writing or by means of tests, are provided to the best of our knowledge, but are non-binding, including with regard to any third-party property rights. The information in this publication does not exempt the processor from carrying out their own tests on our products with regard to their suitability for the intended processes and purposes. The application, use and processing of our products and the products manufactured on the basis of our technical application advice are beyond our control and are therefore the sole responsibility of the processor. If the application for which our products are used is subject to an official authorisation requirement, the user is responsible for obtaining these authorisations. We reserve the right to adapt the product to technical progress and new developments. For the rest, we refer to our General Terms and Conditions, in particular with regard to any liability for defects. You can find our GTC at www.otto-chemie.de.