



OTTOSEAL®

S 100

Technical Datasheet



1-component silicone sealant based on acetate

For indoor and outdoor application

Characteristic:

- **Contains fungicide and bacteriostatic**
Resistance to mould infestation and bacteria
- **Unique processing characteristics**
Surface can be smoothed very easily
- **Excellent weathering, ageing and UV-resistance**
For long-lasting indoor and outdoor applications

Fields of application:

- Expansion joints in connection joints in the floor and wall area
- Expansion joints in bathroom areas
- Sealing of glass modules
- Sealing double-glazings (e. g. "Profilit")

Standards and tests:

- Tested according to EN 15651 – Part 1: F EXT-INT CC 25 LM
- Tested according to EN 15651 – Part 2: G CC 25 LM
- Tested according to EN 15651 – Part 3: XS 1
- Tested according to EN 15651 – Part 4: PW INT 12.5 E
- Suitable for applications according to IVD instruction sheet no. 3-1+3-2+14+31+35 (IVD = German industry association sealants)
- Quality seal of the IVD (Industrial association for sealants, registered society), tested by the ift Rosenheim (Institute of window engineering, registered society)
- According to regulation (EG) no. 1907/2006 (REACH)
- French VOC-emission class A+
- Declaration in "baubook" Austria
- EMICODE® EC 1 Plus - very low emission
- Classification according to building certification systems, see the sustainability data sheet
- Tested fire behaviour in accordance with EN 13501: class E

Important information:

EMICODE® is a registered trademark of GEV e. V. (Düsseldorf, Germany)

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.

While curing small amounts of acetic acid 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.

Remark on the application of the colour "alu": Please note that visible dividing lines could appear when the silicone surface is being smoothed and layers of silicone are pushed on top of each other (e. g. in corner areas). These dividing lines can not be removed by smoothing them afterwards. This effect occurs only with the colour "alu" and is caused by a special colour pigment, which creates the metallic effect. It is a specific characteristic of the product in colour "alu" and it does not represent a deficiency. In order to avoid this effect, make sure, that layers of silicone are not pushed on top of each other. Avoid contact with materials which contain bitumen and which release solvents, e. g. butyl, EPDM, neoprene, insulating- and bituminous paint.

Upon restoring of joints contaminated with mould the existing elastic sealant must be removed completely. Before re-jointing, the affected jointing areas are to be treated with OTTO Anti-Mildew Spray to remove possibly existing fungal spores. Otherwise a new mould attack may occur in the joints again, despite the mould protection technology of the sealant.

Technical properties:

| | |
|-----------------------------------------------------------------------|---------------|
| Skin-forming time at 23 °C/50 % RH [minutes] | ~ 10 |
| Curing in 24 hours at 23 °C/50 % RH [mm] | ~ 2-3 |
| Processing temperature from/to [°C] | + 5 / + 35 |
| Viscosity at 23 °C | pasty, stable |
| Density at 23 °C according to ISO 1183-1 [g/cm³] | ~ 1,0 |
| Shore-A-hardness according to ISO 868 | ~ 20 |
| Permissible movement capability [%] | 25 (1) |
| Class according to ISO 11600 F | 25 LM |
| Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm²] | ~ 0,3 |
| Tensile expansion according to ISO 37, type 3 [%] | ~ 900 |
| Tensile strength according to ISO 37, type 3 [N/mm²] | ~ 1,8 |
| Temperature resistance from/to [°C] | - 40 / + 180 |
| Extrusion rate according to ISO 8394-1 [g/min.] | ~ 140 - 170 |
| Shrinkage of volume according to ISO 10563 [%] | ~ 5 |
| Shelf life at 23 °C/50 % RH for cartridge/foil bag [months] | 18 |

1) Please pay attention to standards and tests

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.

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, should be removed. Cleaning of non-porous substrates: Apply OTTO Cleaner T (airing time approx. 1 minute) using a clean, lint-free cotton cloth. Cleaning porous substrates: Clean surfaces with steel-wire brush e. g. or a grinding disk to remove loose particles.

Primer Table:

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 according to the recommendations of our technical department (e. g. +/OTTO Primer 1216) in order to achieve a resilient bonding.

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|---------------------------------------------|--------------|
| Acrylic glass/PMMA | - |
| Acrylic bathroom surfaces (e. g. bath tubs) | + / 1101 |
| Aluminium | + |
| Aluminium anodized | 1216 |
| Aluminium powder-coated | 1101 / T |
| Aluminium powder-coated (contains teflon) | T |
| Concrete | 1105 |
| Concrete block | - |
| Lead | - |
| Stainless steel | 1216 |
| Iron | - |
| Epoxid resin coating | + |
| Epoxid resin mortar | 1216 / T (1) |
| Glass | + / 1226 |

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|--------------------------------------------------|-----------------|
| Wood, painted (solvent systems) | + |
| Wood, painted (aqueous systems) | 1216 |
| Wood, varnished (solvent systems) | 1216 |
| Wood, varnished (aqueous systems) | 1215 / 1226 |
| Wood, untreated | 1215 / 1225 (2) |
| Ceramic, glazed | + (3) |
| Ceramics, unglazed | + |
| Plastic profiles (unplasticized, e. g. Vinnolit) | 1217 / 1226 |
| Copper | - |
| Melamine resin panels | 1216 |
| Brass | - |
| Solid surface material | + / 1101 / 1216 |
| Natural stone / marble | - |
| Polyester | + |
| Polypropylene | - |
| Cellular concrete | 1105 |
| Plaster | 1105 |
| PVC unplasticized | 1217 / 1225 |
| PVC-soft-foils | 1217 / 1226 |
| Tinplate | - |
| Zinc, galvanised iron | - |

- 1) Upon high exposure to water please test beforehand.
2) Upon high exposure to water please contact our Technical Department.
3) When using ceramic tiles with a special surface coating such as Ceramicplus of Villeroy + Boch we recommend a pre-treatment with OTTO Cleanprimer 1226. When using ceramic tiles with other surface coatings it is advisable to contact our Technical Department or make preliminary tests.

+ = good adherence without primer

- = not suitable

T = Test/pilot test advised

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:

| | 300 ml cartridge | 400 ml aluminium foil bag | 580 ml aluminium foil bag |
|--------------------|------------------|---------------------------|---------------------------|
| aegean | S100-03-C91 | on request | on request |
| agate grey | S100-03-C62 | on request | on request |
| almond-brown | S100-03-C1104 | on request | on request |
| alu | S100-03-C14 | on request | on request |
| anemone | S100-03-C22 | on request | on request |
| anthracite | S100-03-C67 | on request | on request |
| asphalt grey | S100-03-C808 | on request | on request |
| bahamabeige | S100-03-C10 | on request | on request |
| bali | S100-03-C21 | on request | on request |
| basalt | S100-03-C1105 | on request | on request |
| beach-beige | S100-03-C1106 | on request | on request |
| bermuda | S100-03-C25 | on request | on request |
| black | S100-03-C04 | on request | on request |
| bowe | S100-03-C6777 | on request | on request |
| brown | S100-03-C05 | on request | on request |
| caramel | S100-03-C09 | on request | on request |
| cement-grey no. 31 | S100-03-C706 | on request | on request |
| chestnut | S100-03-C1082 | on request | on request |
| chinchilla | S100-03-C45 | on request | on request |

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|-----------------------|---------------|--------------|-------------|
| concrete grey | S100-03-C56 | S100-07-C56 | on request |
| cottojoint | S100-03-C75 | on request | on request |
| crocus | S100-03-C24 | on request | on request |
| crocus-blue | S100-03-C753 | on request | on request |
| curry | S100-03-C19 | on request | on request |
| deer-brown | S100-03-C07 | on request | on request |
| fair grey no. 21 | S100-03-C501 | on request | on request |
| fair-graphite | S100-03-C1168 | on request | on request |
| fiery red | S100-03-C35 | on request | on request |
| flannel grey | S100-03-C72 | S100-07-C72 | on request |
| flash grey | S100-03-C787 | S100-07-C787 | on request |
| fog | S100-03-C230 | S100-07-C230 | on request |
| grey | S100-03-C02 | S100-07-C02 | on request |
| grey 15 | S100-03-C776 | on request | on request |
| grey-red | S100-03-C1010 | on request | on request |
| grey-white | S100-03-C70 | on request | on request |
| intense brown | S100-03-C7117 | on request | on request |
| jasmin | S100-03-C08 | on request | on request |
| joint white | S100-03-C69 | on request | on request |
| joint-grey | S100-03-C71 | S100-07-C71 | on request |
| light-grey | S100-03-C38 | on request | on request |
| magnolia | S100-03-C23 | on request | on request |
| manhattan | S100-03-C43 | S100-07-C43 | on request |
| melba | S100-03-C1169 | on request | on request |
| middle-brown | S100-03-C15 | on request | on request |
| mint | S100-03-C40 | on request | on request |
| moosgreen | S100-03-C11 | on request | on request |
| morning-grey | S100-03-C961 | on request | on request |
| natural | S100-03-C55 | on request | on request |
| old grey | S100-03-C1170 | on request | on request |
| old white | S100-03-C51 | on request | on request |
| pale grey | S100-03-C86 | on request | on request |
| pastel beige | S100-03-C74 | on request | on request |
| pergamon | S100-03-C84 | on request | on request |
| platinum grey | S100-03-C52 | on request | on request |
| red-beige | S100-03-C82 | on request | on request |
| red-brown | S100-03-C7116 | on request | on request |
| ruby | S100-03-C59 | on request | on request |
| sahara | S100-03-C103 | on request | on request |
| sand grey 18 | S100-03-C2044 | on request | on request |
| sandbeige | S100-03-C6672 | on request | on request |
| sanitary grey | S100-03-C18 | S100-07-C18 | S100-08-C18 |
| silk | S100-03-C6778 | on request | on request |
| silk grey | S100-03-C77 | S100-07-C77 | on request |
| silver effect | S100-03-C510 | on request | on request |
| silver-grey | S100-03-C94 | S100-07-C94 | S100-08-C94 |
| silver-grey no. 17 | S100-03-C910 | on request | on request |
| snow-white | S100-03-C116 | on request | on request |
| sorrentoblue | S100-03-C42 | on request | on request |
| stella | S100-03-C27 | on request | on request |
| stone grey | S100-03-C79 | on request | on request |
| sunset | S100-03-C26 | on request | on request |
| thistle-grey | S100-03-C81 | on request | on request |
| titan grey | S100-03-C1172 | on request | on request |
| tobacco brown | S100-03-C1167 | on request | on request |
| transparent | S100-03-C00 | on request | on request |
| umbra | S100-03-C60 | on request | on request |
| vanilla-beige | S100-03-C1107 | on request | on request |
| velvet black | S100-03-C5176 | on request | on request |
| volcano sand | S100-03-C6776 | on request | on request |
| whisperblue | S100-03-C92 | on request | on request |
| white | S100-03-C01 | S100-07-C01 | on request |
| Packaging unit | 20 | 20 | 20 |

| Pieces per pallet | 1200 | 900 | 600 |
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| 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 |