

**OTTOSEAL®****S 117**

Technical Datasheet

**1-component silicone sealant based on oxime, neutral cross-linking, MEKO-free**

For indoor and outdoor application

## Characteristic:

- **Contains fungicides**  
Resistance to mould infestation
- **Compatible with natural stone**  
Does not cause any migratory staining on natural stone
- **Non-corrosive**  
No (oxidation) corrosion on unprotected metal surfaces
- **Excellent weathering, ageing and UV-resistance**  
For long-lasting indoor and outdoor applications

## Fields of application:

- Sealing and jointing on marble and all natural stones, e. g. sandstone, quartzite, granite, gneiss, porphyry etc. in interior and exterior areas
- Sealing of expansion joints in wall and façade areas

## Standards and tests:

- Tested according to EN 15651 – Part 1: F EXT-INT CC 20 LM
- Tested according to EN 15651 – Part 3: XS 1
- Suitable for applications according to IVD instruction sheet no. 3-1+3-2+14+23+25+27+31+35 (IVD = German industry association sealants)
- French VOC-emission class A+
- Tested fire behaviour in accordance with EN 13501: class E
- Classification according to building certification systems, see the sustainability data sheet

## 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 the curing process of the material reaction products of the crosslinker are released.

Ensure good ventilation during application and curing.

The sealant thickness in the joints with back-up foam rod OTTOCORD PE-B2 is to be limited to max. 10 mm. If the depth of the joint is too low, a PE foil can be placed in the base of the joint in order to prevent a three-edge bond of the sealant.

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 10 mm please contact our technical department beforehand.

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

Smoke from cigarettes or similar environmental influences may lead to discolouring of the sealant. Indoors without daylight or in the case of sporadic artificial lighting, alkoxy/oxime/amine silicone sealants may exhibit a yellowing over time, especially in transparent and light colours. If technically possible, it is recommended to use acetate silicones in these cases. 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 - 20     |
| 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         |
| Density at 23°C according to ISO 1183-1, matt [g/cm³]                 | ~ 1,25        |
| Shore-A-hardness according to ISO 868                                 | ~ 25          |
| Permissible movement capability [%]                                   | 20            |
| Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm²] | ~ 0,4         |
| Tensile expansion according to ISO 37, type 3 [%]                     | ~ 600         |
| Tensile strength according to ISO 37, type 3 [N/mm²]                  | ~ 1,5         |
| Temperature resistance from/to [°C]                                   | - 40 / + 180  |
| Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]           | 12 (1)        |

1) from date of manufacture

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.

|   |                    |
|---|--------------------|
| Acrylic glass/PMMA                          | -                  |
| Acrylic bathroom surfaces (e. g. bath tubs) | + / 1101           |
| Aluminium                                   | +                  |
| Aluminium anodized                          | + / 1101           |
| Aluminium powder-coated                     | 1101 / T           |
| Aluminium powder-coated (contains teflon)   | T                  |
| Concrete                                    | 1105 / 1215 / 1218 |
| Concrete block                              | 1216               |
| Lead  | +                  |
| Chrome                                      | 1216               |
| Stainless steel                             | + / 1216           |
| Iron  | +                  |
| Epoxid resin coating                        | T                  |
| Fibre cement                                | 1215               |
| Glass                                       | +                  |
| Wood, painted (solvent systems)             | +                  |
| Wood, painted (aqueous systems)             | +                  |
| Wood, varnished (solvent systems)           | +                  |
| Wood, varnished (aqueous systems)           | +                  |
| Wood, untreated                             | + (1)              |



|  |                 |
|--|-----------------|
| Ceramic, glazed                                  | +               |
| Ceramics, unglazed                               | +               |
| Artificial stone                                 | + / 1216        |
| Plastic profiles (unplasticized, e. g. Vinnolit) | 1217 / 1227     |
| Copper   | + (2)           |
| Melamine resin panels                            | 1216            |
| Brass  | + (2)           |
| Natural stone                                    | + / 1216 (3)    |
| Polyester  | +               |
| Polypropylene                                    | -               |
| Cellular concrete                                | 1105 / 1215     |
| Plaster  | + / 1105 / 1215 |
| PVC unplasticized                                | 1217 / 1227     |
| PVC-soft-foils                                   | 1217            |
| Sandstone  | 1102            |
| Tinplate   | 1216            |
| Zinc, galvanised iron                            | + / 1216        |

- 1) Upon high exposure to water please contact our Technical Department.
- 2) The reaction of neutral silicone with non-ferrous metals, such as copper, brass, etc. is possible. Upon curing unblocked air admission is necessary.
- 3) Depending on the nature of external influences and the kind of natural stone it may be necessary to use a primer. For natural stone in contact with water (i.e. bathrooms and showers) we generally advise the use of OTTO Primer1216. For jointing natural stone in swimming pools and sauna's and also for other applications under water please contact our technical department.

+ = good adherence without primer  
- = not suitable  
T = Test/pilot test advised

#### Application information:

Especially with unpolished natural stone surfaces make sure not to spread the sealant beyond the joints, as the sealant is difficult to remove once it enters the pores of the natural stones. In particular in sensitive, rough and absorbent natural stone surfaces such as sandstone and limestone, we recommend taping off the joint edges in order to keep the sealant from being pressed into the natural stone surface when smoothing. This will cause stains that cannot be removed later. Dust deposits on the silicone residues may lead to further contamination. For smoothing use OTTO Marble Silicone Smoothing Agent (undiluted). Wash / remove excess agent immediately. We do not recommend the use of usual smoothing agents (e. g. dishwashing detergents etc.) because of the high sensibility to staining of some marble and natural stone varieties. 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:

##### Paints unfilled (gloss)

|                 | 310 ml cartridge | 400 ml aluminium foil bag |
|-----------------|------------------|---------------------------|
| anthracite      | S117-04-C67      | S117-07-C67               |
| bahamabeige     | S117-04-C10      | S117-07-C10               |
| black           | S117-04-C04      | on request                |
| buxy            | S117-04-C4098    | on request                |
| concrete grey   | S117-04-C56      | S117-07-C56               |
| jasmin          | S117-04-C08      | on request                |
| manhattan       | S117-04-C43      | S117-07-C43               |
| pearl-grey      | S117-04-C80      | on request                |
| sandstone-beige | S117-04-C1110    | on request                |
| sanitary grey   | S117-04-C18      | S117-07-C18               |
| transparent     | S117-04-C00      | on request                |

|                          |             |            |
|--------------------------|-------------|------------|
| white                    | S117-04-C01 | on request |
| <b>Packaging unit</b>    | <b>20</b>   | <b>20</b>  |
| <b>Pieces per pallet</b> | <b>1200</b> | <b>900</b> |

#### Paints filled (matte)

|                          | 310 ml cartridge | 400 ml aluminium foil bag |
|--------------------------|------------------|---------------------------|
| matt anthracite          | S117-04-C1300    | on request                |
| matt bahamabeige         | S117-04-C6115    | on request                |
| matt black               | S117-04-C6114    | on request                |
| matt manhattan           | S117-04-C1282    | on request                |
| matt sanitary grey       | S117-04-C6111    | on request                |
| <b>Packaging unit</b>    | <b>20</b>        | <b>20</b>                 |
| <b>Pieces per pallet</b> | <b>1200</b>      | <b>900</b>                |

**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>