

SPECIAL

OTTOSEAL®

S 80

Technical Datasheet



1-component silicone sealant based on alkoxy, neutral cross-linking

For indoor and outdoor application

Characteristic:

- **Also available in matt-finished colours**
Harmonises with matte surfaces
- **Also available in matte sanded colours**
Harmonises with matte and cementitious joint surfaces
- **Contains fungicides**
Resistance to mould infestation
- **Compatible with natural stone according to ISO 16938-1**
Guarantee - does not cause any migratory staining on natural stone
- **Low odour**
Convenient processing
- **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 the area of floors, walls and facades
- Expansion joints in bathroom areas
- For the external sealing of mirrors in connection with natural stone
- Sealing of lacquered and enamelled glass
- Joint filling material between ceramic tiles and natural stone outdoors
- Movement-compensating bonding of natural stone on metal, e. g. stairs on a metal construction

Standards and tests:

- Tested according to EN 15651 – Part 1: F EXT-INT CC 25
- Tested according to EN 15651 – Part 3: S
- Tested according to EN 15651 – Part 4: PW EXT-INT 12.5 E
- Tested according to ISO 16938-1 of SKZ Würzburg (Testing for migratory staining of sealants on natural stone)
- Declaration of no objection – tested for use in food-related area (ISEGA Forschungs- und Untersuchungs-Gesellschaft mbH, Aschaffenburg, Germany)
- Suitable for applications according to IVD instruction sheet no. 3-1+3-2+9+14+23+25+27+30+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:

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.

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

During curing small amounts of alcohol 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.

So as not to overstrain the stress-compensating product in its movement absorption and its compressive strength in bonds with high load-bearing capacities (e.g. of natural stone slabs), we recommend providing pressure-resistant support (plastic glazing blocks).

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.

How to prevent mould when renovating joints:

For a professional renovation of joints it is absolutely necessary to remove all of the sealant damaged by mould thoroughly. It is also important to remove any residue from the bottom and the sides of the joint. Having done this the joint has to be treated with OTTO Anti-Mildew Spray to kill off any leftover fungus spores. Only now the joint can be filled again.

If these measures are not carried out accurately, the sealant, even though it contains fungicides, can be infected by mould again shortly after because the spores are still in the joint. Please also observe technical data sheet of the OTTO Anti-Mildew Spray.

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Technical properties:

Skin-forming time at 23 °C/50 % RH [minutes]	~ 10
Curing in 24 hours at 23 °C/50 % RH [mm]	~ 2
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]	~ 1,3
Density at 23°C according to ISO 1183-1, matt sanded [g/cm³]	~ 1,4
Shore-A-hardness according to ISO 868	~ 19
Shore-A-hardness according to ISO 868, matt colours	~ 27
Shore-A-hardness according to ISO 868, matt sanded colours	~ 30
Permissible movement capability [%]	25
Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm²]	~ 0,4
Stress expansion modulus at 100 % according to ISO 37, type 3, matt [N/mm²]	~ 0,5
Stress expansion modulus at 100 % according to ISO 37, type 3, matt sanded [N/mm²]	~ 0,6
Tensile expansion according to ISO 37, type 3 [%]	~ 300 - 700
Tensile strength according to ISO 37, type 3 [N/mm²]	~ 1,7
Temperature resistance from/to [°C]	- 40 / + 120
Shrinkage of volume according to ISO 10563 [%]	< 10
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.

ABS	T
Acrylic glass/PMMA	+ / 1217
Acrylic bathroom surfaces (e. g. bath tubs)	1101 / 1217
Aluminium	+ / 1216
Aluminium anodized	+
Aluminium powder-coated	1101 / T
Aluminium powder-coated (contains teflon)	T
Concrete	1105 / 1215
Concrete block	1216
Stainless steel	+ / 1216
Epoxid resin coating	+
Glass	+
Wood, painted (solvent systems)	+ / 1216
Wood, painted (aqueous systems)	+
Wood, varnished (solvent systems)	+ / 1216
Wood, varnished (aqueous systems)	+
Wood, untreated	+ (1)
Ceramic, glazed	+
Ceramics, unglazed	+
Copper	+ (2)
Brass	+ (2)
Natural stone	+ / 1216 (3)
Cellular concrete	1105
Plaster	1105
PVC unplasticized	1217
PVC-soft-foils	1217
Sandstone	1102
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 the extraneous influents and the type of natural stone, primer may be required. In the case of natural stone subject to loads of water (e.g. in bathrooms and shower facilities, we generally recommend OTTO Primer 1216.

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.

When tooling off the matt finish with OTTO Marble Smoothing Agent - please be aware: The joint should be tooling off once, with a smoothing tool immersed in OTTO Marble Smoothing Agent. Do not make too many repeat passes with the smoothing tool to avoid polishing the matt surface!

When smoothing matte sanded shades with OTTO marble smoothing agent, it should also be noted that it is not recommended to smooth the joint with a finger, as this presses the sand particles into the sealant and they are no longer visible on the surface. That is why we recommend smoothing off matte sanded colours with a smoothing tool.

We recommend OTTO Marble Silicone Smoothing Agent (undiluted) for smoothing on marble and natural stones. Excess smoothing agent must be washed off/removed immediately. We advise against the use of conventional smoothing liquids (such as washing-up liquids), since some natural stones are very sensitive and stains/spots might be caused on the surface of the natural stone. With all other

substrates OTTO Glättmittel can be used for smoothing too.

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	S80-04-C67	on request
anthracite grey	S80-04-C137	on request
bahamabeige	S80-04-C10	on request
light-grey	S80-04-C38	on request
manhattan	S80-04-C43	on request
sanitary grey	S80-04-C18	on request
transparent	S80-04-C00	on request
white	S80-04-C01	on request
Packaging unit	20	20
Pieces per pallet	1200	900

Paints filled (matte)

	310 ml cartridge	400 ml aluminium foil bag
matt anthracite	S80-04-C1300	on request
matt anthracite grey	S80-04-C6116	on request
matt bahamabeige	S80-04-C6115	on request
matt black	S80-04-C6114	on request
matt jasmin	S80-04-C6117	on request
matt manhattan	S80-04-C1282	on request
matt sanitary grey	S80-04-C6111	on request
matt white	S80-04-C6112	on request
Packaging unit	20	20
Pieces per pallet	1200	900

Paints filled (matt sanded)

	310 ml cartridge	400 ml aluminium foil bag
matt sanded concrete grey	S80-04-C8654	on request
matt sanded jasmin	S80-04-C8652	on request
matt sanded old white	S80-04-C8656	on request
matt sanded sanitary grey	S80-04-C8650	on request
Packaging unit	20	20
Pieces per pallet	1200	900

Packagings on request

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>

