

OTTOSEAL® S 80 SPECIAL

The low odour natural stone silicone



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

For indoor and outdoor application

S 80



Characteristics

- ▶ Low odour - No odour nuisance
- ▶ Compatible with natural stone according to ISO 16938-1 - Does not cause any migratory staining on natural stone
- ▶ Available in matte colours - Harmonises perfectly with matte surfaces
- ▶ Also available in matte sanded colours - Harmonises perfectly with matte and cementitious joint surfaces
- ▶ Contains fungicides - Resistance to mould infestation
- ▶ Excellent weathering, ageing and UV-resistance

Fields of application

- ▶ Sealing of expansion joints in the area of floors and walls areas
- ▶ Sealing of expansion joints in the area of facades
- ▶ Sealing expansion and connection joints in bathroom areas
- ▶ For the external sealing of mirrors in connection with natural stone
- ▶ For jointing on ceramic slabs and natural stone in exterior areas
- ▶ For jointing on marble and all natural stones, e. g. sandstone, quartzite, granite, gneiss, porphyry etc. in interior and exterior areas
- ▶ Sealing of lacquered and enamelled glass
- ▶ Movement-compensating bonding of natural stone on metal, e. g. stairs on a metal construction

Standards and tests

- ▶ Tested according to EN 15651 – Part 4: PW EXT-INT 12.5 E
- ▶ Tested according to EN 15651 – Part 1: F EXT-INT CC 25
- ▶ Tested according to EN 15651 – Part 3: S
- ▶ Tested fire behaviour in accordance with EN 13501: class 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)
- ▶ EMICODE® EC 1 Plus - very low emission
- ▶ Quality seal of the IVD (Industrial association for sealants, registered society), tested by the ift Rosenheim (Institute of window engineering, registered society)
- ▶ French VOC-emission class A+
- ▶ Declaration in "baubook" Austria
- ▶ According to regulation (EG) no. 1907/2006 (REACH)
- ▶ 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)



Hermann Otto GmbH
 Krankenhausstr. 14 | 83413 Fridolfing, Germany
 ☎ +49 8684 908-0 | ✉ info@otto-chemie.de
 www.otto-chemie.com

Application advice
 ☎ +49 8684 908-4300
 ✉ tae@otto-chemie.de



SEALING & BONDING

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/cm ³]	~ 1,0
Density at 23°C according to ISO 1183-1, matt [g/cm ³]	~ 1,3
Density at 23°C according to ISO 1183-1, matt sanded [g/cm ³]	~ 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/mm ²]	~ 0,4
Stress expansion modulus at 100 % according to ISO 37, type 3, matt [N/mm ²]	~ 0,5
Stress expansion modulus at 100 % according to ISO 37, type 3, matt sanded [N/mm ²]	~ 0,6
Tensile expansion according to ISO 37, type 3 [%]	~ 300 - 700
Tensile strength according to ISO 37, type 3 [N/mm ²]	~ 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 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. Cleaning of non-porous substrates: Clean with OTTO Cleaner T (no flash-off time required) and a clean, lint-free cloth. Cleaning porous substrates: Clean surfaces mechanically, e.g. with a steel brush or a grinding disc, 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 un-blocked 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.

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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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.

Observe the following when smoothing matte colours with OTTO natural stone smoothing agents: The joints should only be tooled once with a smoothing tool, which was dipped in OTTO natural stone smoothing agent. The more often the surface is reworked with smoothing agent, the more the matte effect is lost and the joint becomes glossier.

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





Glossy colors

	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
Pieces per packaging unit	20	20
Pieces per pallet	1200	900

Matte colors

	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 jasmin	S80-04-C6117	on request
 matt manhattan	S80-04-C1282	on request
 matt sanitary grey	S80-04-C6111	on request
 matt black	S80-04-C6114	on request
 matt white	S80-04-C6112	on request
Pieces per packaging unit	20	20
Pieces per pallet	1200	900

Matt sanded colors

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

Packagings on request

Due to typographical reasons the colours shown below may differ from the original colours of the products. For an exact colour display please request our original colour charts.

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.

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.