OTTOSEAL® S 117

The natural stone silicone



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

For indoor and outdoor application

S 117

Characteristics

- Compatible with natural stone Does not cause greasy deposits on natural stones
- > Contains fungicides Resistance to mould infestation
- > Does not cause corrosion on unprotected metal surfaces
- > Excellent weathering, ageing and UV-resistance

Fields of application

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

Standards and tests

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

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]	121

¹⁾ from production

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

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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.

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	
	+ T
Epoxid resin coating Fibre cement	1215
Glass	
	+
Wood, painted (solvent systems)	+
Wood, painted (aquaeous systems)	+
Wood, varnished (solvent systems)	+
Wood, varnished (aquaeous 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 metalls, 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.

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

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.

Application information

Especially with unpolished natural stone surfaces make sure not to spread the sealant beyond the joins, 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 diminuition of durability or a change of material characteristics may arise.

Packaging

Glossy colors

	310 ml cartridge	400 ml aluminium foil bag
anthracite	S117-04-C67	S117-07-C67
bahamabeige	S117-04-C10	S117-07-C10
concrete grey	S117-04-C56	S117-07-C56
buxy	S117-04-C4098	on request
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
black	S117-04-C04	on request
transparent	S117-04-C00	on request
white	S117-04-C01	on request
Pieces per packaging unit	20	20
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Glossy colors

Pieces per pallet 1200 900

Matte colors

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

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.