

SPECIAL

OTTOSEAL®

S 121

Technical Datasheet



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

For indoor and outdoor application

Characteristic:

- **Contains fungicides**
Resistance to mould infestation
- **Low odour**
Convenient processing
- **Excellent processing characteristics**
Very good surface smoothness
- **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
- For the external sealing of mirrors in connection with materials such as ceramic, metal, glass etc.

Standards and tests:

- 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+
- 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.

During curing small amounts of alcohol 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.

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.

If using smoothing agent remove the remaining water streaks on the adjoining surfaces immediately after sealing. If the surfaces are cleaned at a later time, permanent streaks may remain.

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.

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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 - 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	~ 21
Permissible movement capability [%]	25 (1)
Class according to ISO 11600	25LM
Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm²]	~ 0,4
Tensile expansion according to ISO 37, type 3 [%]	~ 700
Tensile strength according to ISO 37, type 3 [N/mm²]	~ 1,4
Temperature resistance from/to [°C]	- 40 / + 120
Extrusion rate according to ISO 8394-1 [g/min.]	~ 110 - 150
Shrinkage of volume according to ISO 10563 [%]	~ 3
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	15
Shelf life at 23 °C/50 % RH for pail/drum [months]	15

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.

Acrylic glass/PMMA	-
Acrylic bathroom surfaces (e. g. bath tubs)	+ / 1217 / 1227
Aluminium	+
Aluminium anodized	+
Aluminium powder-coated	1101 / T
Concrete	1215 / 1105
Concrete block	-
Lead	T
Stainless steel	+ / 1216
Iron	T
Epoxid resin coating	T
Fibre cement	1215
Glass	+
Wood, painted (solvent systems)	+

Wood, painted (aqueous systems)	+
Wood, varnished (solvent systems)	+ / 1216
Wood, varnished (aqueous systems)	+
Wood, untreated	+ (1)
Ceramic, glazed	+ (2)
Ceramics, unglazed	+
Plastic profiles (unplasticized, e. g. Vinnolit)	1217 / 1227 / T
Copper	+ (3)
Melamine resin panels	1217 / 1227 / T
Brass	+ (3)
Natural stone / marble	-
Polyester	+
Polypropylene	-
Cellular concrete	1105 / 1215
Plaster	1105 / 1215
PVC unplasticized	+ / 1217 / 1227
PVC-soft-foils	+
Tinplate	+
Zinc, galvanised iron	+

1) Upon high exposure to water please contact our Technical Department.

2) 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.

3) The reaction of neutral silicone with non-ferrous metals, such as copper, brass, etc. is possible. Upon curing unblocked air admission is necessary.

+ = 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.

This sealant is not suitable for bonding mirrors. For this purpose we recommend OTTOCOLL® S 16.

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:

	310 ml cartridge	400 ml aluminium foil bag
anthracite	S121-04-C67	on request
fair jasmin	S121-04-C112	on request
grey	S121-04-C02	on request
joint-grey	S121-04-C71	on request
manhattan	S121-04-C43	on request
silver-grey	S121-04-C94	on request
snow-white	S121-04-C116	on request
transparent	S121-04-C00	on request
transparent-grey	S121-04-C284	on request
white	S121-04-C01	on request
Packaging unit	20	20
Pieces per pallet	1200	900

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>

