

**OTTOSEAL®****S 100****Technical Datasheet****Characteristics:**

- 1-component acetate-curing silicone sealant
- Excellent weathering, ageing and UV-resistance
- Contains fungicide and bacteriostatic
- Unique processing characteristics
- Surface can be smoothed very easily
- Very good adhesion on ceramic substrates
- Stress expansion modulus at 100 % (DIN 53 504, S3A): 0,3 N/mm<sup>2</sup>

**Fields of application:**

- Expansion joints in bathroom areas
- Sealing of expansion joints in floor and wall areas
- Sealing and bonding of glass modules
- Sealing double-glazings (e. g. "Profilit")

**Standards and tests:**

- Tested according to EN 15651 – Part 1: F EXT-INT CC 25 LM
- Tested according to EN 15651 – Part 2: G CC 25 LM
- Tested according to EN 15651 – Part 3: XS 1
- Tested according to EN 15651 – Part 4: PW INT 12.5 E
- "Highly recommendable non-hazardous building product" according to building material list (TOXPROOF) of the TÜV Rheinland, Germany
- 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) Nr. 1907/2006 (REACH)
- French VOC-emission class A+
- Certified according to GOS
- Declaration in "baubook" Austria
- EMICODE® EC 1 Plus - very low emission
- For conformity with DGNB and LEED®, see the sustainability data sheet

**Important information:**

EMICODE® is a registered trademark of GEV e. V. (Düsseldorf, Germany)

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.

While curing small amounts of acetic acid are released.

Ensure good ventilation during application and curing.

After curing the product is completely odourless, physiologically harmless and unmodified.

The required vulcanization time prolongs with increasing thickness of the silicone layer. One-component silicones must not be used for full-surface bonding applications unless special constructional prerequisites are met. If one-component silicones are to be used for thickness layers of more than 15 mm please contact our technical department beforehand.

Remark on the application of the colour "alu": Please note that visible dividing lines could appear when the silicone surface is being smoothed and layers of silicone are pushed on top of each other (e. g. in corner areas). These dividing lines can not be removed by smoothing them afterwards. This effect occurs only with the colour "alu" and is caused by a special colour pigment, which creates the metallic effect. It is a specific characteristic of the product in colour "alu" and it does not represent a deficiency. In order to avoid this effect, make sure, that layers of silicone are not pushed on top of each other. Avoid contact with materials which contain bitumen and which release solvents, e. g. butyl, EPDM, neoprene, insulating- and bituminous paint.

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
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	~ 20
Permissible movement capability [%]	25 (1)
Class according to ISO 11600 F	25 LM
Stress expansion modulus at 100 % according to ISO 37, S3A [N/mm²]	~ 0,3
Tensile expansion according to ISO 37, S3A [%]	~ 900
Tensile strength according to ISO 37, S3A [N/mm²]	~ 1,8
Temperature resistance from/to [°C]	- 40 / + 180
Extrusion rate according to ISO 8394-1 [g/min.]	~ 140 - 170
Shrinkage of volume according to ISO 10563 [%]	< 10
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	18

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 OTTO Primer 1215, 1217 and 1218 are subject to the obligation to inform and to keep records according to the German Regulation of Chemical Interdiction (amongst others prohibition of self service) since 01.11.2005. Please observe the Technical Data Sheets (<http://www.otto-chemie.de/en/data-sheets-certificates>).

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 (Plexiglas®, etc.)	-
Acrylic bathroom surfaces (e. g. bath tubs)	+ / 1101
Aluminium	+
Aluminium anodized	1216
Aluminium powder-coated	1101 / T
Aluminium powder-coated (contains teflon)	T
Concrete	1105
Concrete block	-
Lead	-
Stainless steel	1216
Iron	-

Epoxid resin coating	T
Glass	+ / 1226
Wood, painted (solvent systems)	+
Wood, painted (aqueous systems)	1216
Wood, varnished (solvent systems)	1216
Wood, varnished (aqueous systems)	1215 / 1226
Wood, untreated	1215 / 1225 (1)
Ceramic, glazed	+
Ceramics, unglazed	+
Plastic profiles (unplasticized, e. g. Vinnolit)	1217 / 1226
Copper	-
Melamine formaldehyde resins (e. g. Resopal®)	1216
Brass	-
Natural stone / marble	-
Polyester	+
Polypropylene	-
Cellular concrete	1105
Plaster	1105
PVC unplasticized	1217 / 1225
PVC-soft-foils	1217 / 1226
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.

+ = 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.

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:

	300 ml cartridge	400 ml aluminium foil bag	580 ml aluminium foil bag
aegean	S100-03-C91	on request	on request
aegean blue	S100-03-C695	on request	on request
agate grey	S100-03-C62	on request	on request
almond-brown	S100-03-C1104	on request	on request
alu	S100-03-C14	on request	on request
anemone	S100-03-C22	on request	on request
anthracite	S100-03-C67	on request	on request
asphalt grey	S100-03-C808	on request	on request
bahamabeige	S100-03-C10	on request	on request
bali	S100-03-C21	on request	on request
basalt	S100-03-C1105	on request	on request
beach-beige	S100-03-C1106	on request	on request
bermuda	S100-03-C25	on request	on request
black	S100-03-C04	on request	on request
bowe	S100-03-C6777	on request	on request
brown	S100-03-C05	on request	on request
caramel	S100-03-C09	on request	on request
cement-grey no. 31	S100-03-C706	on request	on request
chinchilla	S100-03-C45	on request	on request
concrete grey	S100-03-C56	S100-07-C56	on request

cottojoint	S100-03-C75	on request	on request
crocus	S100-03-C24	on request	on request
crocus-blue	S100-03-C753	on request	on request
curry	S100-03-C19	on request	on request
deer-brown	S100-03-C07	on request	on request
fair grey no. 21	S100-03-C501	on request	on request
fair-graphite	S100-03-C1168	on request	on request
fiery red	S100-03-C35	on request	on request
flannel grey	S100-03-C72	S100-07-C72	on request
flash grey	S100-03-C787	S100-07-C787	on request
fog	S100-03-C230	S100-07-C230	on request
grey	S100-03-C02	S100-07-C02	on request
grey 15	S100-03-C776	on request	on request
grey-red	S100-03-C1010	on request	on request
grey-white	S100-03-C70	S100-07-C70	on request
intense brown	S100-03-C717	on request	on request
jasmin	S100-03-C08	on request	on request
joint white	S100-03-C69	on request	on request
joint-grey	S100-03-C71	S100-07-C71	on request
light-grey	S100-03-C38	on request	on request
magnolia	S100-03-C23	on request	on request
manhattan	S100-03-C43	S100-07-C43	on request
melba	S100-03-C1169	on request	on request
middle-brown	S100-03-C15	on request	on request
mint	S100-03-C40	on request	on request
moosgreen	S100-03-C11	on request	on request
morning-grey	S100-03-C961	on request	on request
natural	S100-03-C55	on request	on request
old grey	S100-03-C1170	on request	on request
old white	S100-03-C51	on request	on request
pale grey	S100-03-C86	on request	on request
pastel beige	S100-03-C74	on request	on request
pergamon	S100-03-C84	on request	on request
platinum grey	S100-03-C52	on request	on request
red-beige	S100-03-C82	on request	on request
red-brown	S100-03-C7116	on request	on request
ruby	S100-03-C59	on request	on request
sahara	S100-03-C103	on request	on request
sand grey 18	S100-03-C2044	on request	on request
sandbeige	S100-03-C6672	on request	on request
sanitary grey	S100-03-C18	S100-07-C18	S100-08-C18
silk	S100-03-C6778	on request	on request
silk grey	S100-03-C77	S100-07-C77	on request
silver effect	S100-03-C510	on request	on request
silver-grey	S100-03-C94	S100-07-C94	S100-08-C94
silver-grey Nr. 17	S100-03-C910	on request	on request
snow-white	S100-03-C116	on request	on request
sorrentoblue	S100-03-C42	on request	on request
stella	S100-03-C27	on request	on request
stone grey	S100-03-C79	on request	on request
sunset	S100-03-C26	on request	on request
thistle-grey	S100-03-C81	on request	on request
titan grey	S100-03-C1172	on request	on request
tobacco brown	S100-03-C1167	on request	on request
transparent	S100-03-C00	S100-07-C00	on request
umbra	S100-03-C60	on request	on request
vanilla-beige	S100-03-C1107	on request	on request
velvet black	S100-03-C5176	on request	on request
volcano sand	S100-03-C6776	on request	on request
whisperblue	S100-03-C92	on request	on request
white	S100-03-C01	S100-07-C01	on request
<b>Packaging unit</b>	<b>20</b>	<b>20</b>	<b>20</b>
<b>Pieces per pallet</b>	<b>1200</b>	<b>900</b>	<b>600</b>

Safety precautions: Please observe the material safety data sheet.

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>