# OTTOSEAL® S 68

# **Technical Datasheet**

Characteristics: - Neutral-curing 1-component silicone sealant

- Non-corrosive

- Excellent weathering, ageing and UV-resistance

- Contains fungicides

Fields of application:

- Elastic joints in cleanrooms and production areas with strict requirements to hygiene, e. g. electronic sector chip production
- Production rooms for medicines and other medical products
- Sealing of ventilation systems

Standards and tests:

- Tested for applications in the cleanroom sector by the Institute for Hygiene Gelsenkirchen, Germany
- Suitable for use in room ventilation systems according to VDI 6022 (Ass. Of Germ. Engineers), sheet 1 tested according to DIN EN ISO 846 (by the Institute for Hygiene Berlin, Germany)

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.

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.

Due to interaction with liquid or gaseous chemicals e.g. iodine, bromine or aldehyde containing substances, the silicone may discolour. It is adviseable to carry out tests before usage! Avoid contact with materials which contain bitumen and which release solvents, e. g. butyl, EPDM, neoprene, insulating- and bituminous paint.

Please contact our technical department if joints are exposed to heavy chemical or physical load. Remark on the processing of the colour "stainless steel": Please note that when "modelling" the silicone, i. e. when silicone layers are pushed on top of each other (e. g. in corner areas) dark, clearly visible dividing lines could appear. These dividing lines can not be removed by smoothing the lines afterwards. This effect occurs solely for the colour "stainless steel" and is caused by a special colour pigment which is necessary to create the metallic effect. It is a typical characteristic of the colour "stainless steel" and it does not represent a deficiency of the material. In order to avoid such effect, layers of silicone should not be pushed on top of each other when smoothing material.

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. Please observe the Technical Datasheet of OTTO Anti-Mildew Spray.

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## Technical properties:

Skin-forming time at 23 °C / 50 % RAH	approx. 10 minutes
Curing in 24 hours at 23 °C / 50 % RAH	approx. 2 mm
Processing temperature	+5 °C up to +35 °C
Viscosity (23 °C)	pasty, stable
Density at 23 °C	approx. 1,16 g/cm³
Shore-A-hardness (DIN 53 505)	approx. 25
Permissable movement capability	25 %
Stress expansion modulus at 100 % (DIN 53 504, S3A)	approx. 0,4 N/mm2
Breaking expansion (DIN 53 504, S3A)	approx. 600 %
Tensile strength (DIN 53 504, S3A)	approx. 1,5 N/mm²
Temperature resistance	-40 °C up to +180 °C
Shelf life at 23 °C / 50 % RAH for cartridge / foil bag	12 months

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 Regulation of Chemical Interdiction (amongst others prohibition of self service) since 01.11.2005. Please observe the Technical Data Sheets (www.otto-chemie.com).

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.)	OTTOSEAL® S 72
Aluminium	+
Aluminium anodized	+
Aluminium powder-coated	1101 / T
Aluminium powder-coated (contains teflon)	T
Concrete	+ / 1105 / 1215
Chrome	1216
Stainless steel	+ / 1216
Iron	1216
Fibre cement	1105 / 1215
Glass	+
Wood, painted (solvent systems)	+
Wood, painted (aquaeous systems)	+
Wood, varnished (solvent systems)	+
Wood, varnished (aquaeous systems)	+
Wood, untreated	1215 / 1226 (1)
Ceramic, glazed	+
Ceramics, unglazed	+
Plastic profiles (unplasticized, e. g. Vinnolit)	+
Copper	+ (2)
Brass	+ (3)
Natural stone / marble	OTTOSEAL® S 70
Polyester	+
Polyethylene (PE)	T
Polypropylene	T
Cellular concrete	1105 / 1215
Plaster	+ / 1105 / 1215
PVC-soft-foils	+
Tinplate	1216

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Zinc, galvanised iron

1216

- + = good adherence without primer
- = not suitable
- T= Test/pilot test advised
- 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 unblocked air admission is necessary.
- 3) The reaction of neutral silicone with non-ferrous metalls, such as copper, brass, etc. is possible. Upon curing unblocked air admission is necessary.

## 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 % RAH) 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: Please see the packagings available from stock in our current General Catalogue for Building Products.

**Trading unit/Container**310 ml cartridge

Packaging unit
20

Pieces per pallet
1200

 Colours:
 C197
 stainless steel
 C00
 transparent

 C9001
 RAL 9001
 C9002
 RAL 9002

C9010 RAL 9010

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 experiences.

However, since conditions and methods of use and application of our products are beyond our control, we suggest you to 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 concludingly. 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 responsable 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 paries' rights and - if necessary - resolving it. For the rest our general terms and conditions apply, in particular regarding a possible liability for deffects. You can find our general terms and conditions on our homepage: http://www.otto-chemie.com.

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