

OTTOSEAL®**S 68**

Technical Datasheet

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

For indoor and outdoor application

Characteristic:

- **Contains fungicides**
Resistance to mould infestation
- **Non-corrosive**
No (oxidation) corrosion on unprotected metal surfaces
- **Excellent weathering, ageing and UV-resistance**
For long-lasting indoor and outdoor applications

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 HVAC systems in accordance with VDI 6022, sheet 1, tested in accordance with DIN EN ISO 846, procedures A, B and C (Institute for hygiene, Berlin)
- Suitable for applications according to IVD instruction sheet no. 31+35 (IVD = German industry association sealants)
- French VOC-emission class A+

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 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 advisable 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.

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/cm³]	~ 1,2
Shore-A-hardness according to ISO 868	~ 25
Permissible movement capability [%]	25
Stress expansion modulus at 100 % according to ISO 37, S3A [N/mm²]	~ 0,4
Tensile expansion according to ISO 37, S3A [%]	~ 600
Tensile strength according to ISO 37, S3A [N/mm²]	~ 1,5
Temperature resistance from/to [°C]	- 40 / + 180
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	12

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 (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 (aqueous systems)	+
Wood, varnished (solvent systems)	+
Wood, varnished (aqueous systems)	+
Wood, untreated	1215 / 1226 (1)
Ceramic, glazed	+
Ceramics, unglazed	+
Plastic profiles (unplasticized, e. g. Vinnolit)	+
Copper	+ (2)
Brass	+ (2)
Natural stone / marble	OTTOSEAL® S 70
Polyester	+
Polyethylene (PE)	T

Polypropylene	T
Cellular concrete	1105 / 1215
Plaster	+ / 1105 / 1215
PVC-soft-foils	+
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 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.

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	580 ml aluminium foil bag
RAL 7035	S68-04-C7035	S68-08-C7035
RAL 9001	S68-04-C9001	S68-08-C9001
RAL 9002	S68-04-C9002	S68-08-C9002
RAL 9007	S68-04-C9007	S68-08-C9007
RAL 9010	S68-04-C9010	S68-08-C9010
RAL 9016	S68-04-C9016	S68-08-C9016
grey	S68-04-C02	S68-08-C02
manhattan	S68-04-C43	on request
stainless steel	S68-04-C197	S68-08-C197
transparent	S68-04-C00	S68-08-C00
Packaging unit	20	20
Pieces per pallet	1200	600

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>

