

OTTOSEAL®**S 50****Technical Datasheet****1-component silicone sealant based on acetate**

For indoor and outdoor application

Characteristic:

- **Excellent weathering, ageing and UV-resistance**
For long-lasting indoor and outdoor applications
- **Cures to a crystal-clear silicone**
For unobtrusive applications

Fields of application:

- Applications on glass, plastics, aluminium, e. g. for glass ornaments, the bonding of lattices
- Glass construction, vitrines and shop windows
- Small area bonding

Standards and tests:

- Suitable for applications according to IVD instruction sheet no. 30+31+35 (IVD = German industry association sealants)
- French VOC-emission class A+
- Classification according to building certification systems, see the sustainability data sheet

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.

Sensitive to smoothing agents. Milky cloudiness can easily develop. If possible do not re-smoothen or use very heavily diluted soft soap solution only.

While curing small amounts of acetic acid 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 silicone 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.

Not suitable for laminated safety glass

The transparency varies depending on the thickness of the layer.

Technical properties:

Skin-forming time at 23 °C/50 % RH [minutes]	~ 5
Curing in 24 hours at 23 °C/50 % RH [mm]	~ 2
Viscosity at 23 °C	pasty, stable
Density at 23 °C according to ISO 1183-1 [g/cm ³]	~ 1,0
Shore-A-hardness according to ISO 868	~ 21
Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm ²]	~ 0,4
Tensile expansion according to ISO 37, type 3 [%]	~ 600

Tensile strength according to ISO 37, type 3 [N/mm ²]	~ 1,5
Temperature resistance from/to [°C]	- 40 / + 150
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	12 (1)

1) from date of manufacture

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.

Aluminium	+
Aluminium anodized	+ / 1101
Aluminium powder-coated	1101 / T
Aluminium powder-coated (contains teflon)	T
Concrete	1105
Stainless steel	1101
Fibre cement	1105
Glass	+
Ceramic, glazed	+
Ceramics, unglazed	+
Polyester	+
PVC unplasticized	1227

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

Application information:

Ensure good adhesion by pressing and smoothing the sealant to the joint flanks. Curing time depends on the thickness of the silicone layer amongst others, ambient temperature and atmospheric humidity. Not suitable for:

- joints, which are walked or driven over
- joints, which are in direct contact with food
- structural glazing
- under water area
- aquaria bonding
- non ferrous metals, non-corrosion-resistant metals

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
crystal clear	S50-04-C30
Packaging unit	20



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