Technical datasheet

OTTOSEAL® S 50

The crystal clear silicone



1-component silicone sealant based on acetate

Characteristics

- > Excellent weathering, ageing and UV-resistance
- Cures to a crystal clear silicone For unobtrusive applications

Fields of application

> Glass construction, vitrines and shop windows

Standards and tests

- Meets the requirements for fire behavior according to EN 13501: Class E
- French VOC-emission class A+
- Suitable for applications according to IVD instruction sheet no. 30+31+35 (IVD = German industry association sealants)

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]	121

1) from production

These data are not suitable for the issue of specifications. Please contact OTTO-CHEMIE before issuing specifications.

Pretreatment

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S 50



The adherent surfaces have to be clean, free from fat, dry and sustainable.

The adhesive surfaces must be cleaned and any contamination such as release agents, preservatives, grease, oil, dust, water, old adhesives/sealants and other substances impairing adhesion must be removed. Cleaning of non-porous substrates: Clean with OTTO Cleaner T (no flash-off time required) and a clean, lint-free cloth. Cleaning porous substrates: Clean surfaces mechanically, e.g. with a steel brush or a grinding disc, 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)	Т
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

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 curing time increases as the layer thickness of the silicone increases. Single-component silicones are not suitable for surface bonding unless the special design requirements are met. If the silicone is to be used in layer thicknesses of more than 15 mm, please contact the application technology 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.

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 diminuition of durability or a change of material characteristics may arise.

Packaging

	310 ml cartridge
🔵 crystal clear	S50-04-C30
Pieces per packaging unit	20
Pieces per pallet	1200

Due to typographical reasons the colours shown below may differ from the original colours of the products.

Safety precautions

Please observe the material safety data sheet. After curing, the product is odourless.

Disposal

Information about disposal: Please refer to the material safety data sheet.

Warranty information

The above information and our technical application advice, whether verbal, in writing or by means of tests, are provided to the best of our knowledge, but are non-binding, including with regard to any third-party property rights. The information in this publication does not exempt the processor from carrying out their own tests on our products with regard to their suitability for the intended processes and purposes. The application, use and processing of our products and the products manufactured on the basis of our technical application advice are beyond our control and are therefore the sole responsibility of the processor. If the application for which our products are used is subject to an official authorisation requirement, the user is responsible for obtaining these authorisations. We reserve the right to adapt the product to technical progress and new developments. For the rest, we refer to our General Terms and Conditions, in particular with regard to any liability for defects. You can find our GTC at www.otto-chemie.de.