

# OTTOSEAL® S 10 SPECIAL

## The silicone sealant for glass constructions



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

For indoor and outdoor application

S 10

### Characteristics

- ▶ Compatible with PVB sheets according to the criteria of ift guideline DI-02/1 - Suitable for processing VSG
- ▶ Excellent weathering, ageing and UV-resistance
- ▶ Very good adhesion on many substrates even without primer (see the primer table)
- ▶ High resistance to notches and tearing - Resistant to high mechanical stresses
- ▶ Does not cause corrosion on unprotected metal surfaces

### Fields of application

- ▶ Sealing of expansion joints in building construction
- ▶ For the weather sealing of structural glazing, angled glazing, timber-glass-composite elements, roof glazing and conservatories
- ▶ For jointing on glass elements
- ▶ Installation of X-ray protective glass

### 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 fire behaviour in accordance with EN 13501: class E
- ▶ UL 94 Flame Classification HB, RTI 105 °C, File No. E 176319
- ▶ Tested and recommended by Schott Desag AG Deutsches Spezialglas, D-31073 Grünenplan, for the installation of RD 50 and RD 30 X-ray protective glass
- ▶ French VOC-emission class A+
- ▶ Suitable for applications according to IVD instruction sheet no. 22+30+31+35 (IVD = German industry association sealants)

### 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 / + 40
Viscosity at 23 °C	pasty, stable
Density at 23 °C according to ISO 1183-1 [g/cm <sup>3</sup> ]	~ 1,0
Shore-A-hardness according to ISO 868	~ 18
Permissible movement capability [%]	~ 25
Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm <sup>2</sup> ]	~ 0,3
Tensile expansion according to ISO 37, type 3 [%]	~ 600
Tensile strength according to ISO 37, type 3 [N/mm <sup>2</sup> ]	~ 1,3
Temperature resistance from/to [°C]	- 40 / + 180
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	12
Shelf life at 23 °C/50 % RH for pail/drum [months]	6



Shrinkage of volume according to ISO 10563 [%] ~ 4

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

## Pretreatment

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.

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

## 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.

ABS	1217
Acrylic glass/PMMA	T
Acrylic bathroom surfaces (e. g. bath tubs)	+ / 1101
Aluminium	+
Aluminium anodized	+ / 1216
Aluminium powder-coated	T / 1101
Aluminium powder-coated (contains teflon)	T
Lead	1216
Chrome	+
Stainless steel	+ / 1216
Iron	+
Epoxid resin coating	+ / 1216
Sintered / enamelled surfaces	+
Glass	+ / 1226
Ceramic, glazed	+
Ceramics, unglazed	+
Copper	+ <sup>1</sup>
Melamine resin panels	T
Brass	+ <sup>1</sup>
Polyamide	+ / 1216
Polycarbonate	+
Polyester	+
Polyethylene (PE)	-
Polypropylene	T / 1221
Polystyrene	+ / 1217
Porcelain-coated surfaces	+
PVC unplasticized	+ / 1217
PVC-soft-foils	1217
Teflon® (PTFE, Polytetrafluorethylen)	-
Zinc, galvanised iron	+

1) The reaction of neutral silicone with non-ferrous metals, such as copper, brass, etc. is possible. Upon curing un-blocked air admission is necessary.

+ = 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.

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 are not suitable for full-area bonding, unless there are specific structural conditions that require such full-area application. If one-component silicones 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.

Paints, lacquers, plastics and any other coatings must be compatible to the adhesive/sealant.

Compatible with PVB-foils for laminated glass units. Please contact our technical department when using laminated glass units with cast resin and also for insulating glass edge seals based on polysulphide or polyurethane.

If using smoothing agent remove the remaining water streaks on the adjoining surfaces immediately after sealing. If the surfaces are cleaned at a later time, permanent streaks may remain.

In overlapping bonding/sealing of polycarbonate sheets, especially outdoors, discolouration of the sealant can not be excluded. Indoors without daylight or in the case of sporadic artificial lighting, alkoxy/oxime/amine silicone sealants may exhibit a yellowing over time, especially in transparent and light colours. If technically possible, it is recommended to use acetate silicones in these cases.

## 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

### Glossy colors

	310 ml cartridge
● black	S10-04-C04
○ transparent	S10-04-C00
○ white	S10-04-C01
<b>Pieces per packaging unit</b>	<b>20</b>
<b>Pieces per pallet</b>	<b>1200</b>

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.

## Brand information

Teflon® is a registered brand of The Chemours Company FC, LLC, Wilmington Del., US

## 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](http://www.otto-chemie.de).