

**OTTOSEAL®****S 10**

Technical Datasheet

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

For indoor and outdoor application

## Characteristic:

- **Compatible with PVB sheets according to ift guideline DI-02/1**  
Suitable for processing VSG
- **Non-corrosive**  
No (oxidation) corrosion on unprotected metal surfaces
- **Very good adhesion on many substrates even without primer**  
Often primerless processing possible, see primer table in technical data sheet
- **High resistance to notches, tension and tearing**  
Resistant to high mechanical stresses
- **Excellent weathering, ageing and UV-resistance**  
For long-lasting indoor and outdoor applications

## Fields of application:

- Sealing of expansion joints in building construction
- Also suitable for weather sealing of structural glazing, angled glazing, timber-glass-composite elements, roof glazing and conservatories
- Suitable for sealing glazing units
- Installation of X-ray protective glass
- Elastic sealing in the electric industry, mechanical engineering, automotive and shipbuilding
- Not suitable for the structural bonding of structural glazing units

## 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
- The compatibility with strainless Plexiglas® has been tested and confirmed by the manufacturer. Test report on the compatibility with Plexiglas®- XT is available.
- 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
- UL 94 Flame Classification HB, RTI 105 °C, File No. E 176319
- Suitable for applications according to IVD instruction sheet no. 22+30+31+35 (IVD = German industry association sealants)
- Classification according to building certification systems, see the sustainability data sheet
- French VOC-emission class A+
- Tested fire behaviour in accordance with EN 13501: class E

## 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.

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.

#### 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, S3A [N/mm <sup>2</sup> ]	~ 0,3
Tensile expansion according to ISO 37, S3A [%]	~ 600
Tensile strength according to ISO 37, S3A [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:

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.

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 (Plexiglas®, etc.)	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	+ (1)
Melamine formaldehyde resins (e. g. Resopal®)	T
Brass	+ (1)
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 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
black	S10-04-C04
grey	S10-04-C02
transparent	S10-04-C00
white	S10-04-C01
<b>Packaging unit</b>	<b>20</b>
<b>Pieces per pallet</b>	<b>1200</b>

#### 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>



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