OTTOSEAL®
S 120

Technical Datasheet

Characteristics:

- Neutral-curing 1-component silicone sealant based on alkoxy
- Excellent weathering, ageing and UV-resistance
- Excellent early resistance to stress
- Highly abrasion-resistant and non-streaky
- Good compatibility with paints according to DIN 52452 (not paintable)
- Tack-free surface
- Low odour
- Non-corrosive
- Contains fungicides

Fields of application:

- Window pane sealing on wooden windows
- Glass, window and metal construction
- Suitable for sealing glazing units made of laminated and tempered glass. Please contact our technical department for further information.
- For the external sealing of mirrors in connection with materials such as ceramic, metal, glass etc.

Standards and tests:

- Tested according to DIN 18545, part 2, resistance group E (ift Rosenheim, germany)
- According to the requirements of DIN 18540-F
- According to the requirements of ISO 11600 G 25 LM
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- "Highly recommendable non-hazardous building product" according to building material list (TOXPROOF) of the TÜV Rheinland, Germany

Important information:

Before applying the adhesive / sealant the user has to ensure that the materials in the area of contact (solid, liquid and gaseous) are compatible with the adhesive / sealant and do not damage or alter (e. g. discolour) them. As for the materials that will be used at a later stage in the surrounding area of the adhesive / sealant 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 adhesive / sealant. In case of doubt the user should consult the respective manufacturer of the material.
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.
Due to the multitude of paint systems for wooden windows a general statement regarding adhesion properties or compatibility is not possible. Individual preliminary tests are required.
Do not stack or pack sealed windows/doors earlier than 24 hours after sealing. Otherwise there is a risk of a discolouration of the painting.
During curing small amounts of alcohol are released.
Ensure good ventilation during application and curing.
After curing the product is completely odourless, physiologically harmless and unmodified.
The required vulcanization time prolongs with increasing thickness of the silicone layer. One-component silicones must not be used for full-surface bonding applications except special xzy are provided. If one-component silicones are to be used for thickness layers of more than 15 mm please contact our technical department beforehand.

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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.
Smoke from cigarettes or similar environmental influences may lead to discolouring of the sealant.
For the sealing butt joints between insulating glass with UV-resistant edge bond based on silicone (e. g. angled glazing, structural glazing façades etc.) we recommend OTTOSEAL® S 7.
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. Please observe the Technical Datasheet of OTTO Anti-Mildew Spray.

Technical properties:

Skin-forming time at 23 °C / 50 % RAH	approx. 10 minutes
Curing in 24 hours at 23 °C / 50 % RAH	approx. 2 - 3 mm
Processing temperature	+5 °C up to +40 °C
Viscosity (23 °C)	pasty, stable
Density at 23 °C	approx. 1,02 g/cm³
Shore-A-hardness (DIN 53 505)	approx. 30
Permissable movement capability	25 %
Stress expansion modulus at 100 % (DIN 53 504, S3A)	approx. 0,40 N/mm2
Breaking expansion (DIN 53 504, S3A)	approx. 700 %
Tensile strength (DIN 53 504, S3A)	approx. 1,7 N/mm²
Temperature resistance	-40 °C up to +120 °C
Shelf life at 23 °C / 50 % RAH for cartridge / foil bag	12 months
Shelf life at 23 °C / 50 % RAH for pail / drum	12 months

These data are not suitable for the issueing specifications. Please contact OTTO - CHEMIE before issueing 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 OTTO Primer 1215, 1217 and 1218 are subject to the obligation to inform and to keep records according to the Regulation of Chemical Interdiction (amongst others prohibition of self service) since 01.11.2005. Please observe the Technical Data Sheets (www.otto-chemie.de).
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.)	-
Acrylic bathroom surfaces (e. g. bath tubs)	+ /1217 / 1227
Aluminium	+
Aluminium anodized	+
Aluminium powder-coated	1101 / T
Aluminium powder-coated (contains teflon)	T
Concrete	+ / 1105 / 1215
Concrete block	-
Lead	T
Stainless steel	+ / 1216
Iron	T
Epoxid resin coating	T
Glass	+
Wood, painted (solvent systems)	+
Wood, painted (aquaeous systems)	+
Wood, varnished (solvent systems)	+ / 1216
Wood, varnished (aquaeous systems)	+
Wood, untreated	+ (1)

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Ceramic, glazed	+
Ceramics, unglazed	+
Clinker	1215
Plastic profiles (unplasticized, e. g. Vinnolit)	1217 / 1227 / T
Copper	+ (2)
Melamine formaldehyde resins (e. g. Resopal®)	T
Brass	+ (3)
Natural stone / marble	-
Polyester	T
Polypropylene	-
Cellular concrete	1105 / 1215
Plaster	1105 / 1215
PVC unplasticized	1217 / 1227
PVC - soft - foils	1217 / 1227
Tinplate	+
Zinc, galvanised iron	+

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

1) Upon high exposure to water please contact our Technical Department.
2) The reaction of neutral silicone with non-ferrous metalls, such as copper, brass, etc. is possible. Upon curing unblocked air admission is necessary.
3) The reaction of neutral silicone with non-ferrous metalls, such as copper, brass, etc. is possible. Upon curing unblocked air admission is necessary.

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 % RAH) 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:

Please see the packagings available from stock in our current General Catalogue for Building Products.

Trading unit/Container	**Packaging unit**	**Pieces per pallet**
310 ml cartridge	20	1200
400 ml aluminium foil bag	20	900
580 ml aluminium foil bag	20	600

Colours:

C56	concrete grey	C05	brown
C83	dark oak	C64	fair oak
C742	chestnut	C01	white
C00	transparent	C43	manhattan
C04	black	C39	chocolate brown

Safety precautions:

Please observe the material safety data sheet.

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 experiences. However, since conditions and methods of use and application of our products are beyond our control, we suggest you to 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

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declaration of OTTO – CHEMIE to prove their validity. The characteristics stated in this data sheet define the characteristics of the article broadly and concludingly. 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 responsable 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 paries' rights and - if necessary – resolving it. For the rest our general terms and conditions apply, in particular regarding a possible liability for deffects. If you happen to not have our general terms and conditions at hand, we will gladly send them to you upon request. You can also find them on our homepage: http://www.otto-chemie.de/englisch/unternehmen/agb/AGB-Englisch_04-05.pdf

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