

**OTTOSEAL®****S 113**

Technical Datasheet

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

For indoor and outdoor application

## Characteristic:

- **Contains fungicides**  
Resistance to mould infestation
- **Non-corrosive**  
No (oxidation) corrosion on unprotected metal surfaces
- **Compatible with coatings according to DIN 52452**  
No interaction with existing and adjacent coatings
- **Paintable with many coating systems (preliminary tests necessary)**  
Optical adaptation and protective coating possible
- **Excellent weathering, ageing and UV-resistance**  
For long-lasting indoor and outdoor applications

## Fields of application:

- Window pane sealing on wooden windows
- Sealing of joints on windows and doors made of wood, metal and plastic
- Expansion joints on prefabricated concrete and cellular concrete units
- Sealing of joints on façades, metal constructions

## 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
- Complies with the requirements of DIN 18545, stress group E
- According to the requirements of DIN 18540-F
- French VOC-emission class A+
- Tested fire behaviour in accordance with EN 13501: class E
- 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.

According to the state of the technology shown in for example the IVD-info sheet no. 12, movement equalising sealants cannot, for technical reasons, be completely painted over. If in exceptional cases this is demanded or necessary the coating has to follow the equalising movement of the sealant without optical or mechanical shortcomings. The responsibility to observe this state of the technology rests solely with the user of the coating.

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.

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 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.

Smoke from cigarettes or similar environmental influences may lead to discolouring of the sealant.

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.

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.

#### Technical properties:

|   |               |
|---|---------------|
| Skin-forming time at 23 °C/50 % RH [minutes]                                    | ~ 10 - 25     |
| Curing in 24 hours at 23 °C/50 % RH [mm]  | ~ 2 - 3       |
| Processing temperature from/to [°C]   | + 5 / + 35    |
| Viscosity at 23 °C  | pasty, stable |
| Density at 23 °C according to ISO 1183-1 [g/cm <sup>3</sup> ]                   | ~ 1,3         |
| Shore-A-hardness according to ISO 868   | ~ 26          |
| Permissible movement capability [%]   | 25            |
| Stress expansion modulus at 100 % according to ISO 37, S3A [N/mm <sup>2</sup> ] | ~ 0,4         |
| Tensile expansion according to ISO 37, S3A [%]                                  | ~ 700         |
| Tensile strength according to ISO 37, S3A [N/mm <sup>2</sup> ]                  | ~ 1,2         |
| Temperature resistance from/to [°C]   | - 40 / + 150  |
| Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]                     | 12            |

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.

|   |                |
|---|----------------|
| Aluminium                                   | +              |
| Aluminium anodized                          | +              |
| Aluminium powder-coated                     | T / 1101       |
| Acrylic bathroom surfaces (e. g. bath tubs) | + / 1217       |
| Acrylic glass/PMMA (Plexiglas®, etc.)       | OTTOSEAL® S 72 |
| Concrete                                    | 1225           |
| Lead  | 1216           |
| Chrome                                      | 1216           |
| Stainless steel                             | + / 1216       |
| Fibre cement                                | + / 1215       |
| Glass                                       | + / 1226       |
| Wood, painted (solvent systems)             | + (1)          |
| Wood, painted (aqueous systems)             | + (1)          |
| Wood, varnished (solvent systems)           | + (1)          |
| Wood, varnished (aqueous systems)           | + (1)          |
| Wood, untreated                             | + / 1215 (2)   |

|  |                |
|--|----------------|
| Ceramic, glazed                                  | +              |
| Ceramics, unglazed                               | + / 1215       |
| Artificial stone                                 | OTTOSEAL® S 70 |
| Plastic profiles (unplasticized, e. g. Vinnolit) | + / 1217       |
| Copper   | + / 1216 (3)   |
| Melamine formaldehyde resins (e. g. Resopal®)    | T / 1225       |
| Brass  | + / 1216 (3)   |
| Natural stone / marble                           | OTTOSEAL® S 70 |
| Polyester  | +              |
| Polypropylene                                    | -              |
| Cellular concrete                                | 1215           |
| Plaster  | 1215           |
| PVC unplasticized                                | + / 1217       |
| PVC-soft-foils                                   | 1217           |
| Tinplate   | + / 1216       |
| Zinc, galvanised iron                            | + / 1216       |

- 1) Due to the large number of painting systems for wooden windows, it is not possible to make a general statement regarding bonding and compatibility. For this reason, individual preliminary experiments are necessary.
- 2) Upon high exposure to water please contact our Technical Department.
- 3) 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.

|                   |                          |                  |
|-------------------|--------------------------|------------------|
| <b>Packaging:</b> |                          | 310 ml cartridge |
|                   | RAL 9010                 | S113-04-C9010    |
|                   | <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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