OTTOSEAL®
S 72

Technical Datasheet

1-component silicone sealant and adhesive based on alkoxy, neutral cross-linking

For indoor and outdoor application

Characteristic:

- **Suitable for plastics, e.g. acrylic glass and polycarbonate**
  Adheres without primer to many plastics (except PE, PP and PTFE and similar plastics with low surface tension), adheres very well to double-skin sheets and does not cause stress cracks.
- **Non-corrosive**
  No (oxidation) corrosion on unprotected metal surfaces
- **Low odour**
  Convenient processing
- **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:

- Applications on glass, plastics and aluminium
- Glass construction, vitrines and shop windows
- Small area bonding
- Suitable for acrylic glass and polycarbonate, for example

Standards and tests:

- Positively tested for compatibility when in contact with food (by the Chemical Laboratory Dr. Stegemann, Georgsmarienhütte, Germany)
- Declaration of no objection – tested for use in food-related area (ISEGA Forschungs- und Untersuchungs-Gesellschaft mbH, Aschaffenburg, Germany)
- Suitable for applications according to IVD instruction sheet no. 21+31+35 (IVD = German industry association sealants)
- EMICODE® EC 1 Plus - very low emission
- Classification according to building certification systems, see the sustainability data sheet
- French VOC-emission class A+

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 curing small amounts of alcohol 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.

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Due to interaction with liquid or gaseous chemicals e.g. iodine, bromine or aldehyde containing substances, the silicone may discolour. It is adviseable to carry out tests before usage!
Avoid contact with materials which contain bitumen and which release solvents, e. g. butyl, EPDM, neoprene, insulating- and bituminous paint.
Please contact our technical department if joints are exposed to heavy chemical or physical load.
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.
In overlapping bonding/sealing of polycarbonate sheets, especially outdoors, discolouration of the sealant can not be excluded.
EMICODE® is a registered trademark of GEV e. V. (Düsseldorf, Germany)

Technical properties:

Skin-forming time at 23 °C/50 % RH [minutes]	~ 12
Curing in 24 hours at 23 °C/50 % RH [mm]	~ 2
Processing temperature from/to [°C]	+ 5 / + 40
Viscosity at 23 °C	pasty, stable
Density at 23 °C according to ISO 1183-1 [g/cm³]	~ 1,0
Shore-A-hardness according to ISO 868	~ 30
Permissible movement capability [%]	25
Stress expansion modulus at 100 % according to ISO 37, S3A [N/mm²]	~ 0,4
Tensile expansion according to ISO 37, S3A [%]	~ 600
Tensile strength according to ISO 37, S3A [N/mm²]	~ 1,4
Temperature resistance from/to [°C]	- 40 / + 150 (1)
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	12

1) In cases where the cured sealant is constantly exposed to very high temperatures, the vulcanised product may change colour and its surface may stay somewhat sticky.

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

Pretreatment:

The adherent surfaces have to be clean, free from fat, dry and sustainable.
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.
Clean sensitive plastics with OTTO Cleaner T or with a cleaner which has been recommended by the manufacturer of the plastic.

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	+
Acrylic glass/PMMA	+/1217
Aluminium	+
Aluminium anodized	+
Aluminium powder-coated	1101 / T
Aluminium powder-coated (contains teflon)	T
Concrete	1105 / 1215
Chrome	+
Stainless steel	+
Fibre cement	1105 / 1215
Glass	+
Ceramic, glazed	+
Ceramics, unglazed	+
Plastic profiles (unplasticized, e. g. Vinnolit)	+
Natural stone / marble	OTTOSEAL® S 70

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Polyamide	+
Polycarbonate	+/1217
Polyester	+
Polyethylene (PE)	T
Polypropylene	T
Cellular concrete	1105 / 1215
PVC unplasticized	+
PVC-soft-foils	+
Teflon® (PTFE, Polytetrafluorethylen)	T
Tinplate	1216
Zinc, galvanised iron	1216

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

Packaging:

	310 ml cartridge
RAL 7004	S72-04-C7004
RAL 9010	S72-04-C9010
transparent	S72-04-C00
Packaging unit	**20**
Pieces per pallet	**1200**

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.

Brand information:

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

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 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 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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