OTTOSEAL® S 72 The plastic silicone



S 72

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For indoor and outdoor

application

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



Characteristics

- Compatible with acrylic glass and polycarbonate Does not cause stress cracks
- Adhesion to many plastics without a primer (see primer table in the technical data sheet)
- > Does not cause corrosion on unprotected metal surfaces
- Low odour No odour nuisance
- High resistance to notches and tearing Resistant to high mechanical stresses
- > Excellent weathering, ageing and UV-resistance

Fields of application

- > Applications on glass, plastics and aluminium
- > Glass construction, vitrines and shop windows

Standards and tests

- > Meets the requirements for fire behavior according to EN 13501: Class E
- 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)
- EMICODE® EC 1 Plus very low emission
- French VOC-emission class A+
- > Suitable for applications according to IVD instruction sheet no. 21+31+35 (IVD = German industry association sealants)

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/cm ³]	~ 1,0
Shore-A-hardness according to ISO 868	~ 30
Permissible movement capability [%]	25
Stress expansion modulus at 100 $\%$ according to ISO 37, type 3 $[\rm N/mm^2]$	~ 0,4
Tensile expansion according to ISO 37, type 3 [%]	~ 600
Tensile strength according to ISO 37, type 3 [N/mm ²]	~ 1,4
Temperature resistance from/to [°C]	- 40 / + 150 1
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	12

Hermann Otto GmbH

Krankenhausstr. 14 | 83413 Fridolfing, Germany & +49 8684 908-0 | @ info@otto-chemie.de www.otto-chemie.com Application advice
+49 8684 908-4300
tae@otto-chemie.de





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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.

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.

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

+ = 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 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.

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)

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

Glossy colors

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

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.