

OTTOSEAL®**S 51****Technical Datasheet****Characteristics:**

- 1-component silicone sealant based on a modified amine system
- Excellent weathering, ageing and UV-resistance
- Colour-matched with PVC, rubber and linoleum floor coverings
- Flame resistant

Fields of application:

- Connecting joints in rubber floor
- Connecting joints in linoleum floors
- Connecting joints in PVC floors
- Equalizing sealing of similar and dissimilar working materials such as glass, stainless steel, aluminium and some plastics

Standards and tests:

- Tested and monitored according to DIN 4102-B1 - flame resistant between solid mineral constructional elements (Institute for Wood Research, Technical University Munich, Germany)
- General building inspection certificate (abP) with the number P-HFM B6103
- Tested according to DIN EN ISO 4589-2:1999 Plastics - Definition of the fire-behaviour due to the oxygen index (Bodycote warringtonfire)
- Tested for applications in the cleanroom sector by the Institute for Hygiene Gelsenkirchen, Germany
- Conform to LEED® IEQ-credits 4.1 (Indoor Environmental Quality) adhesives and sealants

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.

During curing small amounts of an amine-/oxime-compound 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 zxy are provided. If one-component silicones are to be used for thickness layers of more than 15 mm please contact our technical department beforehand.

For sealing of linoleum floorings please wet smoothing tool with only a little smoothing agent or rebate dryly. Remove excess smoothing agent on the flooring before drying in order to avoid staining.

Avoid contact with materials which contain bitumen and which release solvents, e. g. butyl, EPDM, neoprene, insulating- and bituminous paint.

Technical properties:

Skin-forming time at 23 °C / 50 % RAH	approx. 6 minutes
Curing in 24 hours at 23 °C / 50 % RAH	approx. 2 - 3 mm
Processing temperature	+5 °C up to +35 °C
Viscosity (23 °C)	pasty, stable
Density at 23 °C	approx. 1,34 g/cm ³
Shore-A-hardness (DIN 53 505)	approx. 25
Permissible movement capability	25 %

Stress expansion modulus at 100 % (DIN 53 504, S3A)	approx. 0,5 N/mm ²
Breaking expansion (DIN 53 504, S3A)	approx. 550 %
Tensile strength (DIN 53 504, S3A)	approx. 1,5 N/mm ²
Temperature resistance	-40 °C up to +150 °C
Shelf life at 23 °C / 50 % RAH for cartridge / foil bag	18 months

These data are not suitable for the issuing 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.

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.

Aluminium	+
Aluminium anodized	+
Aluminium powder-coated	1101 / T
Concrete	1105 / 1215
Stainless steel	1216
Glass	+
Rubber floors	+
Ceramic, glazed	+
Ceramics, unglazed	+
Linoleum	+
Natural stone / marble	-
Plaster	1105 / 1215

+ = good adherence without primer

- = not suitable

T= Test/pilot test advised

Application information:

Amin cross-linking silicone sealants may cause yellowing of certain alkyd paints and various plastics or similar - therefore we recommend carrying out trials before use.

Because of the variety of possible influences while processing and applying customer tests are required.

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 diminution 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

Colours:

C62	agate grey	C67	anthracite
C1042	aqua	C10	bahamabeige

C1062	pale brown	C1063	brown-red
C958	brilliant blue	C1113	cocktail
C1043	cream beige	C1130	curry yellow
C81	thistle-grey	C787	flash grey
C980	green-blue	C1009	caribbean green
C88	pine	C1053	clay
C01	white	C1116	violet
C00	transparent	C1066	tomato
C1172	titan grey	C983	deep sea blue
C964	blue-grey	C1044	melon
C79	stone grey	C1039	petrol
C04	black	C1129	orangina
C1131	oxide-red	C979	sandstone grey
C982	pastel blue	C1056	pastel yellow
C1008	pastel green	C103	sahara
C1112	patina green	C1049	saffron yellow

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 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. 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/agn/AGB-Englisch_04-05.pdf