

OTTOSEAL®**S 54**

Technical Datasheet

1-component silicone sealant based on aminoxime MEKO-free

For indoor and outdoor application

Characteristic:

- **Flame retardant - building material class B1 according to DIN 4102 and DIN EN ISO 4589**
For special fire protection requirements
- **Excellent weathering, ageing and UV-resistance**
For long-lasting indoor and outdoor applications

Fields of application:

- Joints in melted asphalt screeds
- Bonding of EPDM and APTK profiles
- Bonding of jointing tapes based on polysulphide
- Equalizing sealing of similar and dissimilar working materials such as glass, stainless steel, aluminium and some plastics
- Sealing of joints on difficult adhesive substrates, e. g. asphalt, tar etc. Please contact our technical service department for details.

Standards and tests:

- Tested according to EN 15651 – Part 1: F EXT-INT CC 25 LM
- Tested according to EN 15651 – Part 4: PW EXT-INT CC 25 LM
- Tested according to DIN 4102-B1 – hardly inflammable between solid mineral building materials (wood research at the Munich Technical University)
- Tested according to DIN EN ISO 4589-2:1999 Plastics - Definition of the fire-behaviour due to the oxygen index (Bodycote Warringtonfire)
- Conform to LEED® v3 IEQ-credits 4.1 adhesives and sealants
- For DGNB classifications, see the product page on the OTTO website
- Suitable for applications according to IVD instruction sheet no. 11+31+35 (IVD = Germanindustry association sealants)
- 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 an amine-/oxime-compound 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.

Due to the multitude of plastics (as e. g. jointing tapes) we recommend preliminary tests.

Technical properties:

Skin-forming time at 23 °C/50 % RH [minutes]	~ 5
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/cm³]	~ 1,3
Shore-A-hardness according to ISO 868	~ 27
Permissible movement capability [%]	25
Stress expansion modulus at 100 % according to ISO 37, S3A [N/mm²]	~ 0,5
Tensile expansion according to ISO 37, S3A [%]	~ 600
Tensile strength according to ISO 37, S3A [N/mm²]	~ 1,2
Temperature resistance from/to [°C]	- 40 / + 180
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	18

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.

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	1101 / T
Concrete	1105 / 1215
Stainless steel	1101 / 1216
Ethylene-propylene-diene-monomer-profiles	+ / 1216 / T
Fibre cement	1105 / 1215
Jointing tape, silicone polysulphide	+ / T
Jointing tape, silicone	+
Glass	+
Melted asphalt screed	1226 / T
Ceramic, glazed	+
Ceramics, unglazed	+
Copper	+
Natural stone / marble	-
Plaster	1105 / 1215
Zinc, galvanised iron	1101 / 1216

+ = 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.
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.

Packaging:

	310 ml cartridge
black	S54-04-C04
grey	S54-04-C02
white	S54-04-C01
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.

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>