

OTTOSEAL®

S 7

Technical Data Sheet

identical with Novasil® S 7

Characteristics

- Neutral curing RTV-1 silicone sealant
- Excellent weathering, ageing, ozone and UV- resistance
- Fast curing, non-corrosive, long skin-forming time
- User-friendly matt surface
- Very high mechanical strength, notch resistance and tear strength
- Primerless adhesion to glass, stainless steel, aluminium, copper, galvanised steel, concrete, masonry and ceramics
- Compatible with PVB foils for laminated glass units
- Compatible with insulating glass edge sealing based on silicone
- Conforms to the requirements of DIN 18540

Fields of application

- Specially developed for the weathersealing of structural glazing, angled glazing, roof glazing und conservatories
- **OTTOSEAL S 7** is **not** suitable for structural glazing. Please contact our technical department
- **OTTOSEAL S 7** is suitable for joints on insulating glass units and glass elements made of laminated and tempered safety glass. For this please contact our technical service department

Important information

The required vulcanization time prolongs with increasing thickness of the silicone. One-part silicones must not be used for bonding applications where the silicone is supposed to be spread all over the surface except a special design is provided. If one-part silicones will be used in layers of more than 15 mm please contact our technical department. Please also contact our technical department when it comes to sealing joints with heavy chemical or physical load.

Features

OTTOSEAL® S 7 is a ready-to-use, neutral, one part silicone rubber based on an oxime cross-linking system.

Technical properties

Shore-A hardness (DIN 53505):	approx. 24
Tensile elongation (DIN 53504):	approx. 600 %
Modulus at 100 % elongation (DIN 53504):	approx. 0.40 N/mm ²
Movement capability:	25 %
Temperature resistance:	- 40 °C up to + 180 °C
Tooling temperature:	+ 5 °C up to + 40 °C
Skin-forming time (23°C, 50 % RH):	approx. 15 min.
Tensile strength (DIN 53504):	approx. 1.6 N/mm ²
Density:	approx. 1.16 g/cm ³
Viscosity (23 °C):	non-sag, pasty
Shrinkage during vulcanisation	approx. 6%
Curing in 24 hours (23°C 50% RH):	approx. 2 - 3 mm
Shelf life: cartridge / sachet	12 months from the date of manufacture at 23°C, 50%RH
Shelf life: pail / drum	6 months from the date of manufacture at 23°C, 50%RH

These data are not intended for use in preparing specifications. Please contact OTTO – CHEMIE before writing specifications.

Preparation

Compatibility: Paints, lacquers, plastics and any other coatings must be compatible to the adhesive/sealant.

Cleaning: Clean all joints, remove all foreign matter and contaminants such as release agents, preserving agents, grease, oil, dust, water, protective coatings old adhesives or sealants and other substances which could affect adhesion:

Cleaning non-porous substrates: Use OTTO cleaner T, methylated spirit or other cleaners on an acetone or isopropanol basis and a clean, lint-free cotton cloth.

Cleaning porous substrates: Contaminated surfaces shall be cleaned by mechanical means, e.g. with a steel-wire brush or a grinding wheel in order to remove loose particles.

Priming

OTTOSEAL® products are high-performance and highly specialised products which exhibit an excellent primerless adhesion to numerous substrates. Due to the very specific applications and the variety of substrates the application of a primer should be verified by preliminary tests.

Technical service and consulting: Our technical department will be pleased to perform tests for you. Please let us know your application parameters and requirements. In return we will send you a sound technical recommendation specific to your application.

Application primer: In case a primer has to be used an optimal adhesion will be achieved by proceeding the following way:

Apply the Novasil primer with a lint-free cotton cloth on non-porous substrates (metals) or with a brush on porous substrates (concrete) respectively.

Apply the Novasil primer in a thin layer and evenly on the substrates - by using primer in abundance, the primer will form an interlayer which results in an adhesion failure.

Please note: Our primers have been developed especially for OTTOSEAL® / OTTOCOLL® sealants/adhesives to ensure an optimal adhesion and optimal mechanical properties. The interaction/compatibility of our primers and OTTOSEAL® / OTTOCOLL® sealants/adhesives has been tested and released in our laboratory.

Primer table

Acrylic glass, Plexiglas®	R	Polyethylene (PE)	-
Aluminium	+	Polypropylene (PP)	R (110)
Aluminium powder coated, Brass ²	+ / 1101	Porcelain coated surfaces	+
Ceramic tiles, unglazed,	+	PVC soft, foils	1217
Ceramic tiles, glazed	+	PVC unplasticised	1217
Chrome	+	Stainless steel (V2A, V4A)	+
Concrete	+ / 1215	Steel, anodised	+
Copper ¹	+	Steel galvanised	+
Glass	+	Teflon® (PTFE, Polytetrafluorethylene	-
Glass coated	+ / R	Vitrified/enamelled surfaces	+
Masonry	+ / 1215	Wood varnished	+
Melamin-formaldehyde resin (Resopal®)	R / (1225)	Wood impregnated	+
Polycarbonate	R	Wood painted	+
Polyester	+	Wood untreated	1215

+ = good adhesion without primer

- = not suitable

R = further inquiry or preliminary tests required

1 The reaction of OTTOSEAL® S 7 with non-ferrous metals, e.g. chopper, brass, etc. is possible.

Curing should not take place in confined spaces.

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Application information

Provide good ventilation during **application and vulcanisation** of **OTTOSEAL® S 7**.

Joint dimension: The maximum joint movement (expansion and compression) must not exceed +/- 25 % of the joint width.

Use of back-up foam: Closed-cell PE back-up foam should be inserted into the joint in order to avoid adhesion to the bottom of the joint.

Application sealant: In most cases the sealant can be applied immediately after the application of a primer or after the primer has dried up for a short period of time. If using a primer, please refer to the respective technical data sheet.

Avoid trapped air: The joint must be filled completely to avoid trapped air and to make the joint leak-proof.

However, because conditions and methods of use of our products are beyond our control, customer tests are required to ensure that our products are safe, effective and fully satisfactory for the intended end use.

Please observe the recommended shelf life that is printed onto the packaging.

Packaging

Unit	Units per box	Units per pallet
Cartridge 310 ml	20	1200
Alu-Foil bag 580 ml	20	600

Colours

C04 - black

Special colours and RAL-colours on request

Safety precautions

Please refer to the material safety data sheet.

Disposal

Disposal should be made in accordance with federal, state and local regulations.

Warranty information

All information in this publication is based on our current technical knowledge and experiences. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Otto-Chemie's products are safe, effective and fully satisfactory for the intended end 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.) include in case of doubt no acceptance of a guarantee. Otto-Chemie's sole warranty is that the product will meet the Otto-Chemie sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. Otto-Chemie specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability, unless Otto-Chemie provides you with a specific, duly signed endorsement of fitness for use. Otto-Chemie disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent. All mentioned document conditions in this technical data sheet lay down the terms of delivery fully and completely. We reserve the right to alter product constants within the scope of technical progress or new developments. We are pleased to be at your disposal for inquiries, also regarding specific application problems. If the application in which the products are used requires governmental approval or clearance, the user is responsible to obtain such approval. The recommendations do not absolve the user from the obligation of investigating the possibility of infringement of third parties' rights and if necessary, clarifying the position. In the event of deficiency our terms and conditions are applicable. If our terms and conditions are not with you, we send them to you on request.