

OTTOSEAL®

S 10

Technical Data Sheet

identical with Novasil® S 10

Characteristics

- Non corrosive
- Extremely UV-resistant
- Highly crack and notch resistant
- Neutral curing RTV-1 silicone adhesive and sealant based on oxime cross-linking system
- Good adhesion to construction materials of glass, stainless steel, aluminium etc.

Fields of application

- Sealing connecting joints and movement joints in building construction
- Also suitable for weather sealing of structural glazing facades, angled glazing, roof glazing and conservatories
- OTTOSEAL® S 10 is suitable for joints on glass elements made of laminated and tempered safety glass. For this please contact our technical service department
- Installation of X-ray protective glass
- Elastic bonding and sealing in the electrical industry, in mechanical engineering, vehicle construction and shipbuilding
- OTTOSEAL® S 10 is **not** suitable for structural glazing. Please contact our technical service department.

Standards and tests

- Test certificate of Röhm/Darmstadt regarding the suitability for the contact with not prestressed acrylic glass
- Tested and recommended by Schott Desag AG Deutsches Spezialglas, D-31073 Grünenplan, for the installation of RD 50 and RD 30 X-Ray protective glass

Important information

Compatible with PVB-foils for laminated glass units. Please contact our technical service department for laminated glass units with cast resin and also for insulating glass edge seals based on polysulphide or polyurethane.

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.

In case of using smoothing agent please remove residues immediately after finishing the sealing.

Features

OTTOSEAL® S 10 is a ready-to-use, neutral, one part silicone rubber based on an oxime cross-linking system.

Technical properties

Viscosity:	non-sag, pasty
Density:	approx. 1.03 g/cm ³
Shore-A hardness (DIN 53505):	approx. 21
Temperature resistance:	- 40 °C up to + 180 °C
Tooling temperature:	+ 5°C up to + 40°C
Skin-forming time (23°C, 50 % RH):	approx. 5 min.
Movement capability	approx. 25%
Curing in 24 hours (23°C 50% RH):	approx. 2 - 3 mm
Tensile strength (DIN 53504):	approx. 1.3 N/mm ²
Tensile elongation (DIN 53504):	approx. 600 %
Modulus at 100 % elongation (DIN 53504):	approx. 0.30 N/mm ²
Shrinkage	approx. 4%
Shelf life (cartridge / sachet):	12 months from the date of manufacture if stored in the original unopened containers at room temperature
Shelf life: pail / drum	6 months from the date of manufacture if stored in the original unopened containers at room temperature

These data are not intended for 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 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 primer with a lint-free cotton cloth on non-porous substrates (metals) or with a brush on porous substrates (concrete) respectively.

Apply the 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

High demands on adhesion: Extreme fluctuations in temperature, tensile or shear forces, permanent water etc. cause high stress on adhesion. In such cases it is advisable to apply primer according to the recommendations of our technical department – please refer to primer schedule: (+) indicates that **OTTOSEAL[®] S 10 (Novasil[®] S 10)** shows a good adhesion.

ABS	1217	Polyamide	+ / 1216
Acrylic glass, Plexiglas®	R	Polycarbonate	+
Aluminium	+	Polyester	+
Aluminium powder coated,	+ / 1101	Polyethylene (PE)	-
Brass	+	Polypropylene (PP)	R / 110
Ceramic tiles glazed,	+	Polystyrol	+ / 1217
Ceramic tiles, unglazed	+	Porcelain coated surfaces	+
Chrome	+	PVC unplasticised	+ / 1217
Copper	+	PVC soft, foils	1217
Epoxy-resin coated surfaces	+ / 1216	Stainless steel (V2A, V4A)	+ / 1216
Glass	+	Steel, anodised	+ / 1216
Glass coated	+	Steel, red lead coated	+
Lead	1216	Steel galvanised	+
Melamin-formaldehyde resin (Resopal®)	R	Teflon® (PTFE, Polytetrafluorethylene)	-
Mirror	OTTOSEAL® S 16	Vitrified / enamelled surfaces	+
Polyacrylate; sanitary acrylic glass: Altuglas CS	+ / 1217		

+ = good adhesion without primer

- = not suitable

R = further inquiry or preliminary tests required

Application information

Provide good ventilation during the **application and vulcanisation** of **OTTOSEAL® S 10**. 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
Cartridges 310 ml	20	1200

Colours

C02 – grey	C00 - transparent
C04 – black	C01 - white

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.