

OTTOSEAL®

S 34

Technical Data Sheet

identical with Novasil® S 34

Characteristics

- Neutral-curing RTV-1 silicone sealant based on an oxime cross-linking system
- Very high notch resistance and tear strength
- Very good chemical resistance
- High temperature resistance up to + 265°C (510°F)
- Resistant to steam-jet cleaning
- Suitable for areas, which are driven over, e.g. lift-truck and fork-lift traffic (according to IVD information sheet No. 1)
- Non corrosive
- UV-resistant
- Excellent weathering and ageing resistance

Fields of application

- Sealing mechanically highly loaded floor and connection joints, e.g. in storage and production halls, yard areas, parking decks, underground car parks, workshops, car washes etc.
- Sealing chemically highly loaded floor and connection joints e.g. in dairies, abattoirs, beverage and foodstuff producing companies, canteen kitchens etc.

Important information

During vulcanisation **OTTOSEAL® S 34** releases small amounts of an oxime splitting product. After vulcanisation **OTTOSEAL® S 34** is odourless and physiological indifferent. If horizontal joints are subject to high physical abuse, e.g. mechanical stress caused by fork-lift trucks, protection plates or profiles (T-shaped) are recommended. Protection plates are always recommended for horizontal joints measuring more than 15 mm width. Profiles should be used to protect joint flanks of concrete and flooring screed. Important information about sealing of floor joints as well as construction plans is given in the IVD-information sheet No.1. The IVD information sheet is available at Industrieverband Dichtstoffe e.V., Emmastr. 24, 40227 Düsseldorf, phone: 0049 / 211 904 87-0, fax: 0049 / 211 / 904 86-35.

On using a steam-jet apparatus the distance between the joint and the steam nozzle is to be at least 50 cm.

OTTOSEAL® S 34 must have cured completely before the sealed object is exposed to mechanical or chemical stress the first time. **OTTOSEAL® S 34** should have cured at least 24 to 48 hours at room temperature.

OTTOSEAL® S 34 is not suitable for marble and natural stone. For this application we recommend **OTTOSEAL® S 70**.

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.

Technical properties

Viscosity:	non-sag, pasty
Shore-A hardness (DIN 53505):	approx. 36
Temperature resistance:	- 40 °C up to + 265 °C
Tooling temperature	+ 5°C up to + 35°C
Skin-forming time (23°C, 50 % RH):	approx. 10 min.
Density:	approx. 1.16 g/cm ³
Tensile strength (DIN 53504):	approx. 2.9 N/mm ²
Tensile elongation (DIN 53504):	approx. 400 %
Modulus at 100 % elongation (DIN 53504):	approx. 0.90 N/mm ²
Movement capability	approx. 20%
Curing in 24 hours (23°C 50% RH):	approx. 2 - 3 mm
Shelf life (cardrige / sachet):	12 months from the date of manufacture when stored in the original unopened containers at room temperature

Resistance to chemicals at room temperature

Chemical	Concentration	Resistance to chemical
Acetic acid	10 %	+
Acetic acid	20 %	+
Acetone		o
Ammonia solution	25 %	+
Brake fluid DOT 4		o
Caustic soda solution	10 %	+
Caustic soda solution	20 %	+
Caustic soda solution	50 %	+
Citric acid	50 %	+
Cold degreasing agent ARAL		-
Cooler Antifreezeze ARAL Pure		+
Antifreezeze : water 1:2 (-20°C)		+
1:1,5 (-27°C)		+
1:1 (-40°C)		+
Diesel fuel		-
Diocetylphthalate DOP		+
Drilling fluid Mobilmet 151 pure		o
Mobilmet 151 : water 1:3		+
Mobilmet 151 : water 1:5		+
Ethylene glycole		+
Ethylalcohol		+
Formalin	10 %	+
Gear oil ARAL EP SAE 80W		o
Hydrochloric acid	10 %	o
Lactic acid	10%	+
Methanol		+
Motor oil ARAL SAE 15W-40		o
Nitrodilution		-
Petrol		-
Sea water		+
Sodium chloride (fat solution)		+

Agenda

+	Resistant to chemical
o	Short-term resistance to chemical (72 hours)
-	Not resistant

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 specialized products which exhibit an excellent adhesion to numerous substrates even without primer. 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 be able to give you a broad and tailor-made technical recommendation.

Application primer: In case primer has to be used please note:

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

Aluminium	+	Fine stoneware	+ / 1216
Aluminium anodised	+	Glass	+
Concrete	+ / 1215	Ceramics	+
Stainless steel	+	Steel galvanised	1216

+ = 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 34**. **OTTOSEAL® S 34** can be used for

- floor joints / connecting joints

according to IVD information sheet no. 1 on inside areas and outside areas made of concrete and flooring screed, which are exposed to static loads or rolling traffic in factory buildings and warehouses, underground and multi-storey car parks

Because of the very high notch resistance and the very high tear strength **OTTOSEAL® S 34** is very well suited for areas which are regularly cleaned by machines. Nevertheless you have to be careful not to damage the joints with hard cleaning brushes. In case of using steam-jet-apparatus you have to keep a distance between the joint and the steam nozzle of at least 50 cm. The additional use of cleaning chemicals may have an influence on the durability of the sealant.

- floor joints / connecting joints in surroundings contaminated with chemicals

e. g. barrel storages, court areas, trans-shipment areas, laboratories, garages and car-wash centres

- ceramic floors e.g. food industry, dairies, canteen kitchens

Please observe, that elastic joint seals in these areas are maintenance joints according to DIN 52460, which must be checked at regular intervals (e. g. annually) and replaced if necessary to prevent consequential damages.

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
Alu foil packs 400 ml	20	900

Colours

C67 – anthracite

C18 – sanitary grey

C89 – dust grey

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.