Technical datasheet

OTTOSEAL® S 730 SPECIAL

The building joint silicone for exterior RAL assembly

1-component silicone sealant based on oxime, neutral cross-linking, MEKO-free | For outdoor application | S 730

Characteristics

- Complies with the requirements of the RAL assembly guideline (e.g. high water vapour permeability and driving rain tightness) - Complies with tender requirements for component-tested systems and installations
- Excellent weathering, ageing and UV-resistance
- Good compatibility with paints according to DIN 52452 (not paintable) - No interaction with existing and adjacent coatings
- Does not cause corrosion on unprotected metal surfaces
- Contains fungicides - Resistance to mould infestation

Fields of application

- For window and door mounting OUTSIDE
- Water permeable sealing of external joints between windows and construction parts resistant to driving rain to be used in combination with OTTOSEAL® A 710 (for the interior application)

Standards and tests

- Tested according to EN 15651 – Part 1: F EXT-INT CC 25 LM
- Tested fire behaviour in accordance with EN 13501: class E
- Tested according to "Air impermeability and driving rain resistance of joints between window and construction parts after simulated short-term strain" by the ift Rosenheim, Germany (institute for window techniques)
- French VOC-emission class A+
- Suitable for applications according to IVD instruction sheet no. 9+24+27+31+35 (IVD = German industry association sealants)

Technical properties

Skin-forming time at 23 °C/50 % RH [minutes]	~ 5 - 10
Curing in 24 hours at 23 °C/50 % RH [mm]	+ 2
Processing temperature from/to [°C]	+ 5 / + 35
Viscosity at 23 °C	pasty, stable
Density at 23 °C according to ISO 1183-1 [g/cm³]	~ 1,2
Permissible movement capability [%]	25
Tensile strength according to ISO 37, type 3 [N/mm²]	~ 1,4
Temperature resistance from/to [°C]	- 40 / + 180
Water vapour diffusion resistance µ (DIN 53 122 Method 23-0/85)	~ 1500
Water vapour diffusion resistance µ (ISO 7783)	~ 1000
Water vapour diffusion equivalent air layer SD (DIN 53122-1, thickness of the sealant 10 mm) [m]	~ 15
Water vapour diffusion equivalent air layer SD (ISO 7783, thickness of the sealant 10 mm) [m]	~ 10
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	12 [1]

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OTTO CHEMIE
SEALING & BONDING

1) from production

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.
The adhesive surfaces must be cleaned and any contamination such as release agents, preservatives, grease, oil, dust, water, old adhesives/sealants and other substances impairing adhesion must be removed. Cleaning of non-porous substrates: Clean with OTTO Cleaner T (no flash-off time required) and a clean, lint-free cloth. Cleaning porous substrates: Clean surfaces mechanically, e.g. with a steel brush or a grinding disc, 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 German Regulation of Chemical Interdiction (amongst others prohibition of self service) since 01.11.2005. Please observe the Technical Data Sheets (http://www.otto-chemie.de/en/data-sheets-certificates).
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	T / 1101
Aluminium powder-coated (contains teflon)	T
Concrete	+ / 1215
Concrete block	OTTOSEAL® S 70
Stainless steel	+ / 1216
Wood, painted (solvent systems)	+
Wood, painted (aquaeous systems)	+
Wood, varnished (solvent systems)	+
Wood, varnished (aquaeous systems)	+
Wood, untreated	1215
Clinker	1215
Artificial stone	OTTOSEAL® S 70
Plastic profiles (unplasticized, e. g. Vinnolit)	1217
Copper	+ [1]
Brass	+ [1]
Natural stone / marble	OTTOSEAL® S 70
PVC unplasticized	1217
Cellular concrete	1215
Plaster	+ / 1215
Zinc, galvanised iron	+

1) The reaction of neutral silicone with non-ferrous metalls, such as copper, brass, etc. is possible. Upon curing un-blocked air admission is necessary.

+ = good adherence without primer
- = not suitable
T = Test/pilot test advised

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.
Avoid contact with materials which contain bitumen and which release solvents, e. g. butyl, EPDM, neoprene, insulating- and bituminous paint.
Paints, lacquers, plastics and any other coatings must be compatible to the adhesive/sealant.
During the curing process of the material reaction products of the crosslinker are released.

Ensure good ventilation during application and curing.
The required vulcanization time prolongs with increasing thickness of the silicone layer. One-component silicones are not suitable for full-area bonding, unless there are specific structural conditions that require such full-area application. If one-component silicones are to be used for thickness layers of more than 15 mm please contact our technical department beforehand.
If using smoothing agent remove the remaining water streaks on the adjoining surfaces immediately after sealing. If the surfaces are cleaned at a later time, permanent streaks may remain.
Regarding the constructional execution of the connecting joints we refer to the IVD instruction sheet no. 9. (IVD = German industry association sealants)

Application information

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 diminuition of durability or a change of material characteristics may arise.

Packaging

Glossy colors

	310 ml cartridge	580 ml aluminium foil bag
grey	S730-04-C02	on request
white	S730-04-C01	S730-08-C01
Pieces per packaging unit	**20**	**20**
Pieces per pallet	**1200**	**600**

Due to typographical reasons the colours shown below may differ from the original colours of the products.

Safety precautions

Please observe the material safety data sheet.
After curing, the product is odourless.

Disposal

Information about disposal: Please refer to the material safety data sheet.

Warranty information

The above information and our technical application advice, whether verbal, in writing or by means of tests, are provided to the best of our knowledge, but are non-binding, including with regard to any third-party property rights. The information in this publication does not exempt the processor from carrying out their own tests on our products with regard to their suitability for the intended processes and purposes. The application, use and processing of our products and the products manufactured on the basis of our technical application advice are beyond our control and are therefore the sole responsibility of the processor. If the application for which our products are used is subject to an official authorisation requirement, the user is responsible for obtaining these authorisations. We reserve the right to adapt the product to technical progress and new developments. For the rest, we refer to our General Terms and Conditions, in particular with regard to any liability for defects. You can find our GTC at www.otto-chemie.de.