

OTTOSEAL®**M 360****Technical Datasheet****Characteristics:**

- 1-component sealant based on silane-terminated polymers (hybrid)
- Compatible with coatings according to DIN 52452
- Can be painted and varnished – please observe application instruction in TDS
- Good weathering and ageing resistance
- Cures without bubble formation
- Low odour
- Free of isocyanates
- Silicone-free
- Stress expansion modulus at 100 % (DIN 53 504, S3A): 0,4 N/mm²

Fields of application:

- External joints according to DIN 18540-F
- Sealing of joints on façades, metal constructions
- Expansion joints on prefabricated concrete and cellular concrete units
- Bonding of OTTO Window Tapes BAB/A and BAB/I on masonry, concrete, cellular concrete etc.

Standards and tests:

- Tested according to EN 15651 – Part 1: F EXT-INT CC 25 LM
- Tested according to DIN EN ISO 11600 F 25 LM (ift Rosenheim, Germany)
- Suitable for applications according to IVD instruction sheet no. 7+9+12+19-1+20+22+24+27+29+31+32+35 (IVD = German industry association sealants)
- Quality seal of the IVD (Industrial association for sealants, registered society), tested by the ift Rosenheim (Institute of window engineering, registered society)
- According to regulation (EG) Nr. 1907/2006 (REACH)
- Conform to LEED® IEQ-credits 4.1 (Indoor Environmental Quality) adhesives and sealants
- Suitability for DGNB
- French VOC-emission class A+
- Certified according to GOS
- Declaration in "baubook" Austria

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.

Not suitable for window pane sealing, floor joints, bathroom and constantly wet areas and joints exposed to chemicals and all areas beyond our recommendations.

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.

Not suitable for sealing / bonding copper upon impact of UV-radiation and temperature.

For bonding or sealing of glass which is exposed to UV-radiation we recommend the use of our high quality silicone adhesives / sealants such as OTTOSEAL® S 110 / S 120 (for sealing of glazing rebate), OTTOSEAL® S 10 (e.g. for bonding), OTTOSEAL® S 7 (for weathersealing) or OTTOCOLL® S 81 (for bonded windows).

For bonding or sealing of transparent plastic material, such as acrylic glass, exposed to UV-radiation we recommend our silicone sealant OTTOSEAL® S 72.

The colours of the sealant may be affected by environmental influences (high temperature, chemicals, vapours, UV-radiation). This does not affect the characteristics of the product.

Technical properties:

Skin-forming time at 23 °C/50 % RH [minutes]	~ 40
Curing in 24 hours at 23 °C/50 % RH [mm]	~ 2 - 3
Processing temperature from/to [°C]	+ 5 / + 40
Viscosity at 23 °C	pasty, stable
Density at 23 °C according to ISO 1183-1 [g/cm³]	~ 1,4
Shore-A-hardness according to ISO 868	~ 28
Permissible movement capability [%]	25
Class according to ISO 11600	25LM
Stress expansion modulus at 100 % according to ISO 37, S3A [N/mm²]	~ 0,4
Tensile expansion according to ISO 37, S3A [%]	~ 550
Tensile strength according to ISO 37, S3A [N/mm²]	~ 1,6
Temperature resistance from/to [°C]	- 40 / +90
Extrusion rate according to ISO 8394-1 [g/min.]	~ 210 - 260
Shrinkage of volume according to ISO 10563 [%]	< 10
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	9

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.

Acrylic glass/PMMA (Plexiglas®, etc.)	-
Acrylic bathroom surfaces (e. g. bath tubs)	-
Aluminium	+
Aluminium anodized	+
Aluminium powder-coated	T
Concrete	1225
Concrete block	-
Lead	T
Stainless steel	+ / 1216
Iron	T
Epoxid resin coating	+ / 1216
Glass	+
Wood, painted (solvent systems)	+ / 1226
Wood, painted (aqueous systems)	T / 1227
Wood, varnished (solvent systems)	+ / 1227
Wood, varnished (aqueous systems)	+ / 1227
Wood, untreated	T
Ceramic, glazed	+
Ceramics, unglazed	+ / 1216
Plastic profiles (unplasticized, e. g. Vinnolit)	1227
Copper	+ / 1227 (1)
Melamine formaldehyde resins (e. g. Resopal®)	T
Brass	+ / 1227
Natural stone / marble	-

Polyester	T
Polypropylene	-
Cellular concrete	T
Plaster	1225
PVC unplasticized	+ / 1227 / 1225
PVC-soft-foils	-
Tinplate	T
Zinc, galvanised iron	+

1) See "Important information"

+ = good adherence without primer

- = not suitable

T = Test/pilot test advised

Application information:

Our product can be overcoated with paint or varnish. The compatibility between the coating and our product has to be checked before the application by the user/processor - possibly under production conditions. Our OTTO application technology will gladly support you non-committally. If, in exceptional cases, after succesful compatibility test our product is coated over the entire surface, this coating must also be able to follow the elastic movement of the sealant. Otherwise crack formations in the coat of paint or optical impairments may occur.

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:

	580 ml aluminium foil bag
RAL 7016	M360-08-C7016
RAL 7039	M360-08-C7039
RAL 9001	M360-08-C9001
RAL 9016	M360-08-C9016
basalt	M360-08-C2260
black	M360-08-C04
brickred	M360-08-C3178
concrete grey	M360-08-C56
dark brown	M360-08-C49
dark concrete grey	M360-08-C3172
grey aluminium	M360-08-C5078
light greybeige	M360-08-C537
manhattan	M360-08-C43
middle-grey	M360-08-C3182
mortar grey	M360-08-C102
sandbeige	M360-08-C3180
white	M360-08-C01
Packaging unit	20
Pieces per pallet	600

Safety precautions:

Please observe the material safety data sheet.

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>