

OTTOSEAL®**M 360**

Technical Datasheet



1-component hybrid polymer STP sealant

For indoor and outdoor application

Characteristic:

- **Tack-free surface after approx. 6 hours**
Less risk of contamination
- **Silicone-free**
- **Free of isocyanates**
- **Low odour**
Convenient processing
- **Can be painted and varnished – please observe application instruction in Technical Data Sheet**
Decorative paint and protective coating possible
- **Good weathering and ageing resistance**
For long-lasting indoor and outdoor applications
- **Cures without bubble formation**
Suitable for optically demanding joints
- **Temperature resistance from -40 to +90°C.**

Fields of application:

- Building construction joints in accordance with 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.
- Connection to a structure, e.g. connection to a window frame, doors, gates and drywall to the structure such as wall opening as well as transition areas e.g. from a concrete wall to a wooden stud wall/glass partition.
- Closure of cracks and holes in façades and interior walls, such as in scaffolding/paintwork

Standards and tests:

- Tested according to EN 15651 – Part 1: F EXT-INT CC 25 LM / ISO 11600-F-25LM
- Component test "Airtightness and driving rain resistance of a sealant system between window and structural part according to ift guideline MO-01"
- Accumulation water - Testing according to the guideline "Building waterproofing - Connection to floor-deep windows and doors, Part 2" together with Remmers waterproofing system "Liquid waterproofing with fleece carrier"
- EMICODE® EC 1 Plus - very low emission
- 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)
- According to regulation (EG) no. 1907/2006 (REACH)
- Classification according to building certification systems, see the sustainability data sheet
- French VOC-emission class A+
- Declaration in "baubook" Austria
- Tested fire behaviour in accordance with EN 13501: class E

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.

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

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.

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.

Technical properties:

Skin-forming time at 23 °C/50 % RH [minutes]	~ 20 - 30
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]	~ 1,5
Shore-A-hardness according to ISO 868	~ 25
Permissible movement capability [%]	25
Stress expansion modulus at 100% according to ISO 8339 [N/mm²], method B	~ 0,4
Stress expansion modulus at 100 % according to ISO 37, S3A [N/mm²]	~ 0,6
Tensile expansion according to ISO 37, S3A [%]	~ 700
Tensile strength according to ISO 37, S3A [N/mm²]	~ 1,7
Temperature resistance from/to [°C]	- 40 / + 90
Shrinkage of volume according to ISO 10563 [%]	~ 5
Water vapour diffusion resistance μ (ISO 7783)	~ 800
Water vapour diffusion equivalent air layer SD (ISO 7783, thickness of the sealant 10 mm) [m]	~ 8
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	12 (1)

1) from date of manufacture

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 successful 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.

Paints, varnishes, plastics and other coating materials must be compatible with the adhesive/sealant. Pure mineral paints (e.g. based on potassium silicate or lime) are not suitable for painting over the entire surface due to the brittleness of the paint.

Depending on the climatic conditions and the type of painting, the coating materials can be reworked from about 1 hour.

In contact with oxidatively curing paints (e.g. alkyd resin paints) drying and curing can be delayed or prevented.

We recommend preliminary tests.

Coatings and their evaporation can lead to discolouration of the adhesive/sealant.

Discolouration of coatings due to interaction with the adhesive/sealant is not excluded.

For smoothing, use OTTO smoothing agent or OTTO smoothing concentrate instead of water. Remove excess quantities immediately.

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	310 ml cartridge
basalt	M360-08-C2260	M360-04-C2260
black	M360-08-C04	M360-04-C04
brickred	M360-08-C3178	M360-04-C3178
concrete grey	M360-08-C56	M360-04-C56

dark brown	M360-08-C49	M360-04-C49
dark concrete grey	M360-08-C3172	M360-04-C3172
grey aluminium	M360-08-C5078	M360-04-C5078
light greybeige	M360-08-C537	M360-04-C537
manhattan	M360-08-C43	M360-04-C43
middle-grey	M360-08-C3182	M360-04-C3182
mortar grey	M360-08-C102	M360-04-C102
RAL 7016	M360-08-C7016	M360-04-C7016
RAL 7039	M360-08-C7039	M360-04-C7039
RAL 9001	M360-08-C9001	M360-04-C9001
RAL 9016	M360-08-C9016	M360-04-C9016
sandbeige	M360-08-C3180	M360-04-C3180
white	M360-08-C01	M360-04-C01
Packaging unit	20	20
Pieces per pallet	880	1200

Safety precautions: Please observe the material safety data sheet.
After curing the product is completely odourless.

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>