

OTTOSEAL® M 380 SPECIAL

The hybrid for clean rooms and ventilation systems



1-component hybrid polymer STP sealant

For indoor and outdoor application

M 380



Characteristics

- ▶ Silicone-free
- ▶ Low odour - No odour nuisance
- ▶ Can be painted and varnished – please observe application instruction in Technical Data Sheet
- ▶ Contains fungicides - Resistance to mould infestation
- ▶ Does not cause corrosion on unprotected metal surfaces
- ▶ Good weathering and ageing resistance

Fields of application

- ▶ Sealing of air condition and ventilation systems, for example kitchen exhaust ducts
- ▶ For joints in cleanrooms and production areas with strict requirements to hygiene, e.g. electronic sector - chip production
- ▶ For joints in production rooms for medicine and other medical items
- ▶ Sealing of joints in refrigerated warehouses
- ▶ Suitable for joints in hospitals and food processing companies

Standards and tests

- ▶ Meets the requirements for fire behavior according to EN 13501: Class E
- ▶ Tested for applications in the cleanroom area and in accordance with DIN EN ISO 846 by ISEGA Forschungs- und Untersuchungsgesellschaft mbH Aschaffenburg
- ▶ Suitable for use in ventilation systems according to VDI 6022, sheet 1
- ▶ Declaration of no objection – tested for use in food-related area (ISEGA Forschungs- und Untersuchungs-Gesellschaft mbH, Aschaffenburg, Germany)
- ▶ EMICODE® EC 1 Plus - very low emission
- ▶ French VOC-emission class A+
- ▶ Suitable for applications according to IVD instruction sheet no. 31+35 (IVD = German industry association sealants)

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



Hermann Otto GmbH
 Krankenhausstr. 14 | 83413 Fridolfing, Germany
 ☎ +49 8684 908-0 | @ info@otto-chemie.de
 www.otto-chemie.com

Application advice
 ☎ +49 8684 908-4300
 @ tae@otto-chemie.de



SEALING & BONDING

Stress expansion modulus at 100% according to ISO 8339 [N/mm²], method B ~ 0,4

Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm²] ~ 0,6

Tensile expansion according to ISO 37, type 3 [%] ~ 700

Tensile strength according to ISO 37, type 3 [N/mm²] ~ 1,7

Temperature resistance from/to [°C] - 40 / + 90

Shrinkage of volume according to ISO 10563 [%] < 10

Shelf life at 23 °C/50 % RH for cartridge/foil bag [months] 12 ¹

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 dust and grease as well as 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 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
Concrete	1225
Stainless steel	+ / 1216
Glass	+
Wood, painted (solvent systems)	+ / 1226
Wood, painted (aqueous systems)	T / 1227
Wood, varnished (solvent systems)	+ / 1227
Wood, varnished (aqueous systems)	+ / 1227
Ceramic, glazed	+
Ceramics, unglazed	+ / 1216
Plastic profiles (unplasticized, e. g. Vinnolit)	1227
Copper	+ / 1227 ¹
Brass	+ / 1227
Natural stone	-
Polyester	T
Cellular concrete	T
Plaster	1225
Zinc, galvanised iron	+

1) See "Important information"

+ = 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.

Paints, lacquers, plastics and any other coatings must be compatible to the adhesive/sealant.

Due to interaction with liquid or gaseous chemicals e.g. iodine, bromine or aldehyde containing substances, the silicone may discolour. It is advisable to carry out tests before usage!

In indoor areas with little to no UV light, hybrid polymer sealants may discolour over time, especially in light colours. Moreover, aldehydes and similar substances as well as their vapours from cleaning agents and disinfectants, wood materials and other building materials can lead to discolourations of sealants.

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.

Please contact our technical department if joints are exposed to heavy chemical or physical load.

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.

Upon restoring of joints contaminated with mould the existing elastic sealant must be removed completely. Before re-jointing, the affected jointing areas are to be treated with OTTO Anti-Mildew Spray to remove possibly existing fungal spores. Otherwise a new mould attack may occur in the joints again, despite the mould protection technology of the sealant.

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, lacquers, plastics and any other coatings must be compatible to the adhesive/sealant. Materials with alkaline contents may cause interactions in the form of discolouration.

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.

To smooth, apply OTTO smoothing agent spray to the sealant surface as economically as possible and in a targeted manner and only slightly wet the smoothing tools with the OTTO smoothing agent spray. Remove excess 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

Glossy colors

	310 ml cartridge	580 ml aluminium foil bag
 grey metallic	M380-04-C998	M380-08-C998
 RAL 7004	M380-04-C7004	M380-08-C7004
 RAL 9002	M380-04-C9002	M380-08-C9002
 RAL 9010	M380-04-C9010	M380-08-C9010
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.

For an exact colour display please request our original colour charts.

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.

Brand information

EMICODE® is a registered trademark of GEV e. V. (Düsseldorf, Germany)

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.