

Novasil®

M 370

Technical Datasheet

Characteristics:

- 2-component adhesive based on hybrid polymer STP
- Extremely fast curing even in thick layers
- Very fast functionality strength
- Excellent primerless adhesion on numerous substrates - even when exposed to water
- For stress-compensating bonding and dynamic stresses
- Low odour
- Free of isocyanates
- Silicone-free
- Good weathering and ageing resistance
- Compatible with coatings according to DIN 52452
- Can be painted and varnished – please observe application instruction in TDS

Fields of application:

Heating, ventilation and plant construction:

- Sealing of connecting and expansion joints for air-conditioning and ventilation technology purposes

General Industry:

- Elastic bonding for bodywork and vehicle construction purposes, wagon and container construction, metalwork and apparatus construction
- Elastic bonding of same and different materials such as stainless steel, aluminium and some types of plastic

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.

For UV-loaded bonds/seals of glass, we recommend the use of a high-quality silicone adhesive/sealant.

For UV-loaded bonds/seals of transparent plastics such as acrylic glass we recommend the use of a high-quality silicone adhesive/sealant.

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

During curing small amounts of alcohol are released.

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:

Single components:

Component A

Colour	white
Viscosity at 23 °C	pasty
Density at 23 °C according to ISO 1183-1 [g/cm³]	~ 1,21
Shelf life at 23 °C/50 % RH for cartridge [months]	9 (1)
Shelf life at 23 °C/50 % RH for pail/drum [months]	6 (1)

1) from date of manufacture

OTTOCURE M-CA 4005

Colour	fair grey
Viscosity at 23 °C	pasty
Density at 23 °C according to ISO 1183-1 [g/cm ³]	~ 1,52
Mixing ratio according to weight (base A : curing agent B)	1 : 1,26
Mixing ratio according to volume (base A : curing agent B)	1 : 1
Shelf life at 23 °C/50 % RH for cartridge [months]	9 (1)
Shelf life at 23 °C/50 % RH for pail/drum [months]	6 (1)

1) from date of manufacture

Unvulcanised compound: with OTTOCURE M-CA 4005

Colour	fair grey
Viscosity at 23 °C	pasty
Density at 23 °C according to ISO 1183-1 [g/cm ³]	~ 1,37
Processing temperature from/to [°C]	+ 5 / + 40
Shore-A-hardness after 4 hours	~ 25
Shore-A-hardness after 24 hours	~ 32
Pot life at 23 °C/50 % RH [minutes]	~ 5 - 10
Functional strength [minutes]	~ 25 - 40

Vulcanisate:

Shore-A-hardness according to ISO 868	~ 37
Temperature resistance from/to [°C]	- 40 / + 80
Tensile strength according to ISO 37, S3A [N/mm ²]	~ 1,7
Tensile expansion according to ISO 37, S3A [%]	~ 300
Stress expansion modulus at 100 % according to ISO 37, S3A [N/mm ²]	~ 0,8

These data are not suitable for the issue of specifications. Please contact OTTO-CHEMIE before issuing specifications.

Pretreatment:

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.

The adherent surfaces have to be clean, free from dust and grease as well as sustainable.

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 in order to achieve a resilient bonding. Please consult our technical department.

Application information:

Processing of 2-component adhesives and sealants out of side-by-side cartridges:

First of all remove the lids of both component's chambers. Place cartridge into the pistol. Squeeze out material, until material comes out of both chambers. Wipe off material and attach the static mixing nozzle. Check homogeneity of the mixture.

Component A is sensitive to atmospheric humidity and therefore must be protected from moisture.

Component B does not react with atmospheric humidity and is stable under normal conditions (23 °C, 50 % RH).

The longer it is kept in storage, the more likely the B component is to undergo a slight phase separation. In this case a small amount should be carefully extruded from the double cartridge until both components are homogeneous as they come out of the double cartridge. In the case of hobbocks the separation which occurs must be discarded. Thereafter the material can be processed without any problems.

In order to achieve good adhesion and good mechanical properties air entrapment must be avoided. Processing/smoothing: The adhesive/sealant has to be smoothed within pot life in order to ensure close contact with joint edges/substrates. OTTO Smoothing Agent shall not be used. 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.

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.

Protective goggles must be worn when working with the product. Maximum working pressure 5 bar when working with the product using compressed air guns.

Packaging:

	2x310 ml plastic twin cartridge
fair grey	M370-16-C5195
Packaging unit	10/Box incl. 10 static mixing nozzles*
Pieces per pallet	600

*OTTO Static mixing nozzle MGQ 10-19D
Further delivery forms available on request

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>