

Novasil® M 376

The temperature-resistant silicone-free adhesive

M 376

Characteristics

- ▶ 1-component adhesive and sealant based on STP hybrid polymer
- ▶ Temperature resistant up to + 120°C
- ▶ Can be powder-coated following complete hardening (30 min / + 200°C)
- ▶ Fast thorough hardening
- ▶ Broad adhesion spectrum
- ▶ Stress-compensating
- ▶ Silicone-free
- ▶ Free of isocyanates



Fields of application

Heating, ventilation and plant construction:

- ▶ Sealing of connecting and expansion joints for the purposes of the construction of containers, metals and apparatuses
- ▶ Sealing of connecting and expansion joints for air-conditioning and ventilation technology purposes

General Industry:

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

Technical properties

Skin-forming time at 23 °C/50 % RH [minutes]	~ 25 - 40
Processing temperature from/to [°C]	+ 5 / + 40
Viscosity at 23 °C	pasty
Density at 23 °C according to ISO 1183-1 [g/cm³]	~ 1,4
Tensile strength according to ISO 37, type 3 [N/mm²]	~ 4,0
Tensile expansion according to ISO 37, type 3 [%]	~ 400
Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm²]	~ 2,0
Shore-A-hardness according to ISO 868	~ 60
Thorough hardening after 24 hours [mm]	~ 2,5 - 3,0 ¹
Temperature resistance from/to [°C]	- 40 / + 120 ¹
Temperature resistant at +150°C for [hours]	~ 24 ¹
Temperature resistant at +180°C for [minutes]	~ 90 ¹
Temperature resistant at +200°C for [minutes]	~ 30 - 45 ¹
Shelf life at 23 °C/50 % RH for pail/drum [months]	6 ²
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	12 ²

1) Before being subject to high temperatures, the adhesive/sealant must be fully vulcanised. The length of time this thorough hardening takes depends on the thickness of the layer and the ambient conditions.

2) 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.

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.

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.

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.

Application information

Fix the substrates, which are to be bonded, until the adhesive is completely cured.

Curing time can be reduced by humidification and increased temperatures.


For the full-surface bonding of moisture-impermeable material and for the acceleration of the curing process illumination is necessary.

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

	310 ml cartridge
 black	M376-04-C04
Pieces per packaging unit	20
Pieces per pallet	1200

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.

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.