Technical datasheet

Novasil® M 373

The 1-component STP adhesive and sealant for metalwork and vehicle construction purposes

Characteristics

- 1-component adhesive and sealant based on STP hybrid polymer
- Excellent primerless adhesion on numerous substrates - even when exposed to water
- Very high mechanical strength, resistance to notches, tension and tearing
- 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

General Industry:

- Elastic bonding for bodywork and vehicle construction purposes, wagon and container construction, metalwork and apparatus construction
- Bonding of lacquered and enamelled glass

Standards and tests

- Declaration of no objection – tested for use in food-related area (ISEGA Forschungs- und Untersuchungs-Gesellschaft mbH, Aschaffenburg, Germany)

Technical properties

Skin-forming time at 23 °C/50 % RH [minutes]	~ 20
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	~ 55
Permissible movement capability [%]	10
Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm²]	~ 1,8
Tensile expansion according to ISO 37, type 3 [%]	~ 230
Tensile strength according to ISO 37, type 3 [N/mm²]	~ 3,5
Temperature resistance from/to [°C]	- 40 / + 90
Shelf life at 23 °C/50 % RH for cartridge [months]	12 [1]
Shelf life at 23 °C/50 % RH for pail/drum [months]	9 [1]

1) from production

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SEALING & BONDING

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.
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.
The information provided with regards to our adhesion and compatibility tests reflects the status at the time of testing. Changes to the coatings are possible but outside our sphere of influence. With regards to these we advise to contact the producers of glass/coatings concerned.
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

In order to achieve good adhesion and good mechanical properties air entrapment must be avoided.
Curing time can be reduced by humidification and increased temperatures.
For the full-surface bonding of steam-tight substrates the adhesive should be moistened.
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.
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 diminuition of durability or a change of material characteristics may arise.
Please observe the recommended shelf life which is printed on the packaging.

Packaging

	310 ml cartridge
grey	M373-04-C02
black	M373-04-C04
white	M373-04-C01
Pieces per packaging unit	**20**
Pieces per pallet	**1200**

Further delivery forms available on request
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.