

# Maxisil®

## Maxigrab Crystal

Technical Datasheet



### 1-component hybrid polymer STP adhesive

For indoor and outdoor application

#### Characteristic:

- **Crystal clear**  
For inconspicuous bonding
- **Very good adhesion on many materials**  
No pre-treatment required
- **Compatible with natural stone**  
Does not cause greasy deposits on natural stones
- **Bonds to damp surfaces**  
Bonds underwater
- **Elastic**  
Compensate movements
- **Silicone-free**
- **Free of isocyanates**

#### Fields of application:

- Bonding of natural stone and ceramic
- Bonding of mirrors on ceramic, glass, plastic, stainless steel, aluminium, wood, concrete, etc.
- Bonding of window sills, floor strips, decorative strips and stairs
- Bonding and mounting different materials, such as wood, wooden materials, plastics, metals and mineral substrates

#### Standards and tests:

- Suitable for applications according to IVD instruction sheet no. 30+35 (IVD = German industry association sealants)
- French VOC-emission class A+
- EMICODE® EC 1 Plus - very low emission
- Classification according to building certification systems, see the sustainability data sheet
- Declaration in "baubook" Austria

#### 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.

Changes to the product properties (e.g. colour, mechanical properties) caused by external influences (especially by translucent substrates or wide adhesive joints) by, for instance, UV-radiation and higher temperatures) can not be excluded. The adhesive joint design should be considered carefully. 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. EMICODE® is a registered trademark of GEV e. V. (Düsseldorf, Germany)

**Technical properties:**

|   |               |
|---|---------------|
| Skin-forming time at 23 °C/50 % RH [minutes]                          | ~ 40          |
| Curing in 24 hours at 23 °C/50 % RH [mm]                              | ~ 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]                      | ~ 1,0         |
| Shore-A-hardness according to ISO 868                                 | ~ 30          |
| Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm²] | ~ 0,6         |
| Tensile expansion according to ISO 37, type 3 [%]                     | ~ 470         |
| Tensile strength according to ISO 37, type 3 [N/mm²]                  | ~ 2,1         |
| Temperature resistance from/to [°C]                                   | - 40 / + 90   |
| Shelf life at 23 °C/50 % RH [months]                                  | 12 (1)        |

1) from date of manufacture

These data are not suitable for the issue of specifications. Please contact Maxisil before issuing specifications.

**Pretreatment:**

The adherent surfaces have to be clean, free from dust and grease and any contaminants such as release agents, preserving agents, grease, oil, dust, water, old adhesives or sealants and other substances which could affect adhesion. Cleaning of non-porous substrates: Apply Maxisil cleaner (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 joints depend on the respective exterior influences. Extreme fluctuations in temperature, tensile or shear forces, repeated contact with water etc. demand high requirements of joints. In such cases it is advisable to apply primer according to the recommendations of our technical department (e. g. Primer 1216) in order to achieve a resilient bonding.

|                                 |              |
|---------------------------------|--------------|
| Acrylic glass/PMMA              | 1217         |
| Aluminium                       | + / 1216     |
| Aluminium anodized              | + / 1226     |
| Concrete                        | 1225         |
| Stainless steel                 | + / 1216     |
| Epoxid resin coating            | +            |
| Fibre cement                    | 1225         |
| Glass                           | + / 1101     |
| Wood, untreated                 | + / 1215 (1) |
| Ceramic, glazed                 | + / 1216     |
| Ceramics, unglazed              | + / 1216     |
| Copper                          | + / 1216 (2) |
| Brass                           | + / 1226     |
| Metal powder coated / varnished | + / T        |
| Natural stone                   | + / 1216 (3) |
| Polycarbonate                   | + / 1217     |
| Polyester                       | +            |
| Polypropylene                   | -            |
| Cellular concrete               | 1225         |
| PVC unplasticized               | + / 1217     |
| Zinc, galvanised iron           | + / 1216     |

- 1) Upon high exposure to water please contact our Technical Department.
- 2) Not suitable for the sealing of covering plates made of copper.
- 3) Only suitable for bondings. For sealings we recommend our OTTOSEAL® S 70.

+ = good adherence without primer  
 - = not suitable  
 T = Test/pilot test advised

**Application information:**

In order to achieve optimal adhesion and good mechanical characteristics, the entrapment of air in the joint 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. 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.  
 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 packaging 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 |
| transparent              | RDX4001          |
| <b>Packaging unit</b>    | <b>12</b>        |
| <b>Pieces per pallet</b> | <b>1200</b>      |

**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 Maxisil 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 Maxisil 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 [Maxisil.com](http://Maxisil.com)