

# MC-Injekt 2700 L

Rigid sealing injection resin for concrete, masonry and foundation soil.

## PRODUCT PROPERTIES:

- Low-viscosity polyurethane-based duromer resin.
- Good injectability.
- Variable control of reactivity.
- Water-displacing.
- Limited foaming on contact with water (hard foam).
- Durable water impermeability.
- High compressive and tensile strength.
- Corresponds to fire class B2 according to DIN 4102 in the injection medium.
- REACH exposure: water contact permanent, inhalation periodic, processing and application.
- Environmental Product Declaration EPD.

## AREAS OF APPLICATION:

- Sealing and reinforcing of cracked and void-rich structures made of concrete, masonry and natural stone in building construction, civil engineering, hydraulic engineering and general civil engineering.
- Sealing of construction pit enclosures.
- Consolidation of foundation soil in special foundation engineering.
- Increasing the load-bearing capacity of the building site under floor slabs and foundations.
- Sealing of rigid joints in buildings.

## APPLICATION NOTES:

- **Preparatory measures:** Prior to injection, an investigation of the structure and any leaks must be carried out according to the state of the art and the rules of technology and an injection concept must be planned. Packers must be set before injection. A trial injection is recommended.
- **Mixing the components:**
  - Components A and B of **MC-Injekt 2700 L** are mixed as they pass through the mixing head of the injection pump (mixing distance > 20 cm inline static mixer).
  - The pot life/working time of the mixed resin depends on the prevailing ambient temperature. The working time can be extended by cooling the resin components and the resin mixture.
- **Reaction acceleration:** The reaction time of **MC-Injekt 2700 L** can be shortened by adding MC-KAT 27 to 1 % in component A before mixing with component.

| Addition of accelerator in M% | Reaction time |
|-------------------------------|---------------|
| 0                             | 64 mins       |
| 0,05                          | 4 mins        |
| 0,10                          | 1 min 42 sec  |
| 0,25                          | 1 min         |
| 0,50                          | 39 sec        |
| 1,00                          | 23 sec        |

- **Additives:** The thixotropy of the resin can be increased by adding MC-Additive ST. (Addition amount 4 - 7% to component A).
- **Injection:**
  - Injection is performed with the two components being mixed as they are dispensed by the MC-I 710.
  - MC-Bore Packer LS 18 bore packers are recommended for injection into components.
  - Application work should cease once component/substrate temperatures fall below 5°C.
  - Ensure compliance with the information given in the specifications and the Safety Data Sheets.
- **Equipment Cleaning:** Within the working time, all solvent-resistant equipment can be cleaned with MC-Cleaner eco or thinner product MC-Verdünnung PU. Material that has reacted or set will need to be removed mechanically.

#### TECHNICAL DATA:

| Characteristic                          | Unit               | Value  | Comments   |
|---|--------------------|--|--|
| Mixing ratio                            | Parts by volume    | 1 : 1  | Component A : Component B                              |
| Density                                 | Kg/dm <sup>3</sup> | approx. 1.13<br>approx. 1.03<br>approx. 1.22 | EN ISO 2811-1<br>Mixture<br>component A<br>component B |
| Viscosity (dynamic)                     | mPa·s              | approx. 200 ± 50                             | EN ISO 3219  |
| Flexural stress<br>24 h<br>48 h<br>10 d | N/mm <sup>2</sup>  | approx. 9.5<br>approx. 31.5<br>approx. 46.8  | DIN ISO 178 / at 2%                                    |
| Working time                            | minutes            | approx. 45                                   | ASTM D7487<br>at 20°C and 50 % rel. humidity           |
| Application conditions                  | °C                 | 5 - 40                                       | component and subsoil temperature                      |
| Volume change (with water)              | %                  | approx. 200 - 1,000                          | depending on backpressure                              |
| Compressive strength                    | MPa                | approx. 68                                   | EN ISO 604   |
| Tensile strength                        | MPa                | approx. 60                                   | EN ISO 527-1 (dumbbell tensile specimen)               |
| Glass transition temperature            | °C                 | 60.4   |  |

#### Safety advice:

Please note the safety information and advice on the packaging label and the safety information GISCODE: PU40.

## PRODUCT CHARACTERISTICS:

|                               |   |
|-------------------------------|---|
| <b>Color</b>                  | Brown   |
| <b>Cleaning agent</b>         | MC-Thinner PU<br>Water or water-based cleaning agents must not be used under any circumstances.   |
| <b>Shelf-life and storage</b> | Can be stored in original sealed packages at temperatures between 5°C and 35°C in dry conditions for at least 18 months.  |
| <b>Delivery form</b>          | 20 l canister per component A and B<br>MC-KAT 22: bottle 400 ml, 5 bottles each in a box<br>MC-Additive ST: bottle 400 ml, 5 bottles each in a box.   |
| <b>Packaging disposal</b>     | Make sure single-use containers are completely empty. Ensure compliance with our information leaflet "Return of Emptied Transportation and Sale Packaging".<br>We will be glad to send you this on request. |

**Note:** The information provided here is based on our experience and correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual building projects, to the specific application and to non-standard local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. Given these preconditions we shall be liable for the accuracy of the information given as outlined in our sales and delivery terms and conditions. Recommendations by our employees that deviate from this information are only binding for us if they have been confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be adhered.

Edition **01/2024**. Some technical changes have been made to this print medium. Older editions are invalid and may not be used.