

# 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 ADVICE

**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  $\geq 20$  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 min        |
| 0,05                          | 4 min         |
| 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.

## APPLICATION ADVICE

**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 VALUES & PRODUCT CHARACTERISTICS

| Characteristic               | Unit               | Value  | Comments   |
|------------------------------|--------------------|--|--|
| Mixing ratio                 | parts by volume    | 1:1  | comp. A : comp. 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                                  | EN ISO 3219<br>±50                                     |
| Flexural stress              | N/mm <sup>2</sup>  |  | DIN ISO 178 / at 2%                                    |
| 24 h                         |                    | approx. 9.5                                  |  |
| 48 h                         |                    | approx. 31.5                                 |  |
| 10 d                         |                    | approx. 46.8                                 |  |
| 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.<br>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   |  |

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

|                          |  |
|--------------------------|--|
| Colour shade             | brown  |
| Equipment cleaning agent | MC-Verdünnung PU (thinner), under no circumstances should water or aqueous cleaning agents be used   |
| Delivery form            | 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   |
| Storage                  | Can be stored in original sealed packages at temperatures between 5°C and 35°C in dry conditions for at least 18 months.   |
| Packaging disposal       | Make sure single-use containers are completely empty. Ensure compliance with our information leaflet "Return of Emptied Transportation and Sale Packaging". We will be glad to send you this on request. |

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : PU40

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2200007966]