

MC-Injekt 2700 / 2700 L

Force transmitting Injection resins for concrete, brickwork and subsoil

Product Properties

- Low-viscosity polymer reactive injection resin
- Good injectability
- Variable reactivity
- Water-displacing
- Limited foaming when directly mixed with water (rigid foam)
- Waterproof
- High compressive- and tensile strength
- Complying with building material class B2 for fire behaviour acc. to DIN 4102 in the injection medium
- REACH-assessed exposure scenarios: long-term water-contact, periodical inhalation, application

Areas of Application

- Sealing and reinforcing cavities and cracks structures made of concrete, masonry and natural stone in building construction, hydraulic engineering and general civil engineering
- Sealing of construction pit enclosures
- Solidification of subsoil in special foundation engineering
- Increasing the load capacity of subsoil under floor slabs and foundations
- Sealing of rigid joints in structures

Application

Product Description

MC-Injekt 2700 and MC-Injekt 2700 L are two-component injection resins which cure to a water-proof resin body. MC-Injekt 2700 reacts very fast, MC-Injekt 2700 L reacts slowly. The injection resins can be injected into subsoil with and without water stress. They fulfil high water hygienic requirements. In contact or when mixed with water the resins are foaming to a solid and closed-cell foam. Reactivity can be controlled by the use of additives.

Preparative measures

Prior to each application the injectivity of the structure or the subsoil must be checked and an injection concept is to be defined.

Mixing of components

Mixing of the components is carried out during application in the mixing-head of the 2-component injection pump (mixing section 20 cm grid mixers).

Injection packers / Injection lances

For injection suitable injection packers or injection lances with an inner diameter of ≥ 4 mm are to be used. Arrangement and setting depth of the packers have to comply with the injection concept.

Addition of additives

The reaction of the MC-Injekt 2700/2700 L can be accelerated by adding MC-KAT 27 up to 1% into component A before mixing with component B.

By adding MC additive ST, the thixotropy of the resin can be increased. (Addition amount 4 - 7% to component A).

Injection

Injection is carried out using a 2-component injection pump with sufficient capacity, e.g. MC-I 700. MC-Injekt 2700 L may be injected using a 1-component injection pump, e.g. MC-I 510.

Injection of the resins must be stopped if the temperature of the structure /ground < 5 °C and > 40 °C.

Cleaning of equipment

In case of any longer interruption of work, exceeding the pot life of the resin, the injection pump must be flushed thoroughly with MC-Verdünnung PU. Partially or completely cured material can only be removed mechanically.



Technical Data for MC-Injekt 2700 / 2700 L

| Characteristic | Unit | Value* | Comments |
|--|--------------------|---------------------|---------------------------------------|
| Mixing ratio | p. b. v. | 1 : 1 | component A : component B |
| Density | kg/dm ³ | approx. 1.13 | Mixed, DIN EN ISO 2811-1 |
| Dynamic Viscosity | mPa·s | approx. 200 ± 50 | DIN EN ISO 3219 |
| Volume expansion in contact with water | - | 2 - 10 times | depending on counter pressure |
| Application time | | | |
| MC-Injekt 2700 | s | approx. 20-30 | ASTM D7487 |
| MC-Injekt 2700 L | min | approx. 45 | ASTM D7487 |
| Application temperature | °C | + 5 to + 40 | Rock surface and material temperature |
| Compressive strength | N/mm ² | approx. 68 | ISO 604 |
| Tensile strength | N/mm ² | approx. 60 | DIN EN ISO 527-1 |

* All technical data are lab values and relate to + 21 ± 2 °C and 50 % relative humidity.

Product Characteristics for MC-Injekt 2700 / 2700 L

| | |
|--------------------|--|
| Colour | brown |
| Delivery | 20 l canister each component A and B MC-Kat 27: 400 ml bottle, 5 x 400 ml per box MC-Additiv ST: 400 ml bottle, 5 x 400 ml per box |
| Storage | Can be stored in original unopened packs at temperatures between + 5 °C and + 35 °C in dry conditions for at least 18 months. Protect from frost! Same requirements are valid for transport. |
| Equipment cleaning | MC-Verdünnung PU (MC-Thinner PU) Water or water-based cleaning agents must not be used under any circumstance! |
| Disposal | Packs must be emptied completely. |

Safety Advice

Please take notice of the safety information and advice given on the packaging labels and safety information sheets. GISCODE: PU40

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 02/21. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.