



MC-Injekt 2700

Rigid Sealing Injection Resin

Product Properties

- Low-viscosity, polyurethane-based duromer resin
- Short reaction time
- Ductile stability when cured
- Limited foaming when reactive resin is mixed with water
- Fulfils KTW-requirements of test groups D1 and D2
- Fulfils requirements of the DIBt bulletin "Evaluation and effects of construction products on soil and ground water" (11/2000)

Areas of Application

- Rigid sealing and filling of cracks, joints and cavities in structural and civil engineering under dry, water-bearing and high-pressure water-bearing conditions
- Sealing and stabilising of cracks and cavities in loose rock, mountain rock and similar areas
- Sealing of sheet pilings, diaphragm walls and the like on ground water levels
- Sealing of leakages in drinking water structures, pipe sockets, etc.
- REACh-assessed exposure scenarios: long-term water-contact, periodical inhalation, application

Application

Preparation

Before injection, the structure's cracks and voids, respectively the leakage, have to be inspected according to technical standards and regulations, and an injection proposal is to be prepared. High-pressure injection packers with adequately sized nozzles (\geq the nominal diameter of the attached pressure tubing of the pump) must be placed.

Mixing

MC-Injekt 2700 consists of two components, component A (base) and component B (hardener). The components are mixed in the mixing head of a two-component injection-pump, using a suitable static mixer.

Injection

MC-Injekt 2700 should be applied using a two-component injection-pump with an adequate pressure and delivery rate (e.g. MC-I 700 vario).

If MC-Injekt 2700 comes into contact, or is mixed with water, it turns into a hard-flexible, closed-cell foam.

MC-Stahlpacker 18/300 (MC-Steel Packer 18/300) are recommended for the injection.

Work with MC-Injekt 2700 must be stopped if the temperature of the structure drops below + 6 °C.

Opened packs must be used within 24 hours.

Acceleration of reactivity and additives

The reaction time and the characteristics of the reacted product can be modified via accelerators and additives: MC-KAT 27 accelerates the reaction (addition of up to 1 %); MC-Additiv ST thixotropes the reactive resin (addition of approx. 4-7 %). All added quantities refer to component A and are only to be mixed into component A.

Machine Cleaning

In case of an interval longer than the resin's pot life, the injection-pump should be thoroughly flushed with MC-Verdünnung PU (MC-Thinner PU).

Partially and completely cured material can only be removed mechanically.



Technical Data for MC-Injekt 2700

Characteristic	Unit	Value	Comments
Density	g/cm ³	1.13	DIN 53 479 at 20 °C and 50 % relative humidity
Viscosity	mPa·s	approx. 200 ± 50	DIN 53 018 at 20 °C and 50 % relative humidity
Mixing ratio	p. b. v.	1 : 1	component A : component B
Pot life	seconds	30	at 20 °C and 50 % relative humidity
Lowest application temperature	°C	+ 6	air, substrate and material temperature
Compressive strength	N/mm ²	approx. 40	DIN EN 196 T 1
Slant shear strength	N/mm ²	approx. 13.3	BS 6319, part 4
Flexural tensile strength	N/mm ²	approx. 3.5	DIN EN 196 T 1 at 20 °C and 50 % relative humidity
Shore-A-hardness		approx. 90	DIN 53 505
Volume expansion in contact with water		1 - 10 times	depending on counter-pressure

Product Characteristics for MC-Injekt 2700

Cleaning agent	MC-Verdünnung PU (MC-Thinner PU) Water or water-based cleaning agents must not be used under any circumstances!
Colour	brown
Delivery	MC-Injekt 2700 in canisters of 25 l for each component. MC-KAT 27 in a box of three 1 l PE bottles. MC-Additiv ST in a box of three 1 l PE bottles.
Storage	Can be stored in original sealed packages at temperatures between + 10 °C and + 25 °C in dry conditions for at least 1 year. The same requirements are valid for transport.
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 07/09. 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.