

MC-Injekt 2700 L

Sealing and Strengthening Injection Resin

Product Properties

- Low-viscosity, polyurethane-based duromer resin
- Long reaction time
- High compressive and tensile strength
- Limited foaming when reactive resin is mixed with water
- Fulfills UBA - guideline for repair systems in contact with drinking water
- Fulfills requirements of the DIBt bulletin "Evaluation and effects of construction products on soil and ground water" (11/2000)

Areas of Application

- Rigid sealing and strengthening of cracks, joints and cavities in structural, underground 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 have to be inspected according to technical standards and regulations and an injection concept is to be prepared. High-pressure injection packers with adequately sized nozzles (e.g. MC-Stahl-packer 18/300) must be placed.

Mixing

MC-Injekt 2700 L consists of two components, component A and component B. The components are mixed in the mixing head of a two-component injection-pump, using a suitable static mixer (e. g. 30 cm spiral static mixer or 20 inline static mixer in mixing tube of MC-I 700).

Injection

MC-Injekt 2700 L should be applied using a two-component injection-pump with an adequate pressure and delivery rate (e.g. MC-I 700) or a one-component injection-pump (e.g. MC-I 510).

If MC-Injekt 2700 L comes into contact or is mixed with water parts of it turn 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 L must be stopped if the temperature of the structure drops below + 8 °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 %); MC-Additiv FS to produce a defined volume of foam (addition 2 %) in combination with water addition (max. 5 %). 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 resins application time, 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 L

Characteristic	Unit	Value*	Comments
Mixing ratio	p. b. v.	1 : 1	component A : component B
Density	kg/dm ³	approx. 1.13	DIN EN ISO 2811-1
Viscosity	mPa·s	approx. 200 ± 50	DIN EN ISO 3219
Compressive strength	MPa	> 75	DIN EN 196 T 1
Flexural tensile strength	MPa	approx. 65	DIN EN 196 T 1
Increase in volume at water-contact		1 - 10 times	depending on the counter pressure
Application time	minutes	approx. 45	
Application temperature	°C	+ 8 - + 35	air, substrate and material temperature

* All technical values relate to 20 °C and 50 % relative humidity.

Product Characteristics for MC-Injekt 2700 L

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 L in canisters of 20 l for each component MC-KAT 27 in a box of five 400 ml aluminium bottles MC-Additiv ST in a box of five 400 ml aluminium 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 10/14. 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.