



MC-Injekt 2700 L IN

Force transmitting, sealing PU Injection resin for concrete, Masonry and subsoil

Product Properties

- Low-viscosity, polyurethane-based duromer resin
- Good injectability
- Long pot life
- Variable reactivity
- Water-displacing
- High compressive and tensile strength
- Limited foaming when reactive resin is mixed with water (closed cell rigid foam)

Areas of Application

- Sealing and reinforcing cavities and cracks in structures made of concrete, natural stone, in building construction, hydraulic engineering and tunnels
- Sealing and consolidation of cracks and cavities in loose rock, mountain rock and similar areas
- Sealing of sheet pilings, diaphragm walls above or below ground water levels
- Sealing of leakages in drinking water structures, pipe sockets, etc.
- Solidification of subsoil in foundation engineering
- Sealing of pressurized strong water ingress

Application

Product Description

Two component injection resin which cures to a water-proof resin body. The resin can be injected into subsoil with or without water stress. It fulfills high water hygienic requirements. In contact or when mixed with water the resin is foaming to a solid and closed-cell foam. The reactivity can be controlled by use of catalyst & 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 finalized.

Mixing

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

Injection Packer / Injection lances

Suitable injection packers or injection lances with an inner diameter of >4mm are to be used. Arrangements and setting depth of the packers and lances have to comply with injection concept.

Addition of additives

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

By adding MC-Additive ST to component A (approx. 4-7 %) the thixotropy of resin can be increased. In addition, adding of water max 5 % to component A results in self-foaming resin.

Injection

Injection is carried out using 2-component injection pump with sufficient capacity (e.g. MC-I 700). In case of no additives MC Injekt 2700 L IN can be injected using 1-component injection pump (e.g. MC-I 510).

Injection of resin must be stopped when temperature of the structure / soil is below 5° C or above 40° C.

Cleaning of equipment

In case of an interval, interruption of work, exceeding the pot life of resin, the injection-pump must be thoroughly flushed with MC-Thinner PU.

Partially and completely cured material can only be removed mechanically.



Technical Data for MC-Injekt 2700 L IN

Characteristic	Unit	Value*	Comments
Mixing ratio	p. b. v.	1: 1	component A : component B
Density	kg/dm ³	approx. 1.13	
Viscosity	mPa·s	approx. 250 ± 50	at 25 °C (mixed material)
Compressive strength	MPa	> 60	DIN EN 196 T 1
Flexural tensile strength	MPa	approx. 40	DIN EN 196 T 1
Volume increase in water-contact		2 to 15 times	depending on the counter pressure & additive dosage
Application time	minutes	approx. 45	at 25 °C
Application temperature	°C	+5 to +45 °C	air, substrate and material temperature

* All technical values relate to 25 °C and 50 % relative humidity.

Product Characteristics for MC-Injekt 2700 L IN

Cleaning Agent	MC-Thinner PU Water or water-based cleaning agents must not be used under any circumstances!
Colour	brown
Delivery	MC-Injekt 2700 L IN in canisters of 20 l for each component MC-KAT 27: 400ml bottle, (5 x 400ml per box) MC-Additiv ST: 400ml bottle, (5 x 400ml per box)
Storage	Can be stored in original sealed packages at temperatures between + 5°C to + 35 °C in dry conditions for at least 18-months. 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.

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 05/21. 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.