



MC-Montan Injekt TR-X

Softelastic swelling-sealing hydrogel for injection of joints, soil, masonry and concrete components

Product Properties

- Very good injectivity due to low viscosity
- Safe sealing due to high swelling ratio and high elasticity
- Applicable in a wide range of temperature and at very low component temperatures
- Easily adjustable injection paths and low consumption due to short, variable reaction time
- Corresponds to building material class B2 in the fire behaviour acc. to DIN 4102 in the injection medium
- Fulfils the UBA guideline for seals in contact with drinking water
- High chemical resistance even in highly alkaline environment
- Waterproofing up to at least 7 bar water pressure
- Particularly powerful due to polymer reinforcement and high solids content

Areas of Application

- Consolidation and sealing of fine and coarse loose soil - curtain injection
- Extensive sealing injection between tunnel shell and sealing membranes
- Elastic, swellable sealing of component joints (e.g. tunnel segments)
- Sealing of cavities and imperfections in the area of the annular gap
- Sealing of construction joints via injection hose systems
- Injection of components with moisture content dry, moist, water-bearing during injection and with permanent at least one-sided water contact after injection
- Elastic, swellable sealing injection into concrete components according to DIN EN 1504-5: U(S1) W (2/3/4) (1/40)
- REACH-assessed exposure scenarios: long-term water-contact, periodical, application

Application

Preparative measures

Prior to application the injectivity of the soil or the structure must be checked in accordance with the state of the art and an injection concept is to be defined.

Mixing of components

MC-Montan Injekt TR-X is a 2-component injection system. Component A (base) and B (initiator liquid) are mixed from subcomponents in the mixing ratio 1 : 1.

Component A is mixed from subcomponent A1 and A2. Component A2 is poured into component A1 and mixed thoroughly using a wooden paddle.

Component B2 is dissolved in water or in the polymer dispersion (component B1) and mixed with a wooden paddle (maximum draw amount of B2 is 4 %). The reaction times of MC-Montan Injekt TR-X are dependent on the concentration of component B2 in water or component B1.

Dosage of B2

in 23.65 kg
water or B1

(0.2 %)
(0.5 %)
(1.0 %)
(2.0 %)
(4.0 %)

Reaction time

	20 ° C		10 ° C	
	water	B1	water	B1
	8'36"	10'	17'	32'
	5'27"	7'	11'	14'
	3'48"	4'40"	6'30"	9'27"
	3'10"	3'30"	5'15"	6'05"
	2'30"	3'	3'45"	4'15"

Injection

Injection is carried out using a 2-component injection pump, e.g. MC-I 700. The mixing section in the mixing head of the pump must be at least 20 cm long if spiral mixers are used or at least 10 cm long if grid mixers are used. MC-Injektionspacker LS 18 are recommended for injection.

Cleaning of equipment

Within the pot life all tools and equipment can be cleaned with air or water. Partially or completely cured material can only be removed mechanically.



Technical Data for MC-Montan Injekt TR-X

Characteristic	Unit	Value*	Comment
Mixing ratio with comp. B1 with water	kg	23.80 : 1.19	comp. A1 : comp. A2
	kg	24.60 : 0.50	comp. B1 : comp. B2 (standard)
	kg	23.65 : 0.50	water : comp. B2 (standard)
	p.b.v.	1 : 1	comp. A : comp. B
Density			
Comp. A1	kg/dm ³	approx. 1.060	DIN 53479
Comp. A2	kg/dm ³	approx. 0.930	DIN 53479
Comp. B1	kg/dm ³	approx. 1.032	DIN 53479
Mixed density	kg/dm ³	approx. 1.040	DIN 53479 (with comp. B1)
Mixed density	kg/dm ³	approx. 1.020	DIN 53479 (with water)
Viscosity	mPa·s	approx. 15 approx. 2,5	EN ISO 2555 (with comp. B1) EN ISO 2555 (with water)
Elasticity	%	approx. 270 approx. 70	DIN 52455 (with comp. B1) DIN 52455 (with water)
Swelling ratio	%	approx. 100 approx. 120	water storage at 20 °C (with comp. B1) water storage at 20 °C (with water)
Application time	minutes	2'30" to 10' 3'45" to 32'	at 20 °C (see processing instructions) at 10 °C (see processing instructions)
Application temperature	°C	+ 1 to + 40	air, substrate and material temperature

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

Product Characteristics MC-Montan Injekt TR-X

Colour	white
Delivery	component A1 23.8 kg canister / 119 kg drum component A2 1.19 kg canister / 6 canister component B1 24.6 kg canister / 102.6 kg drum component B2 box with 4 x 0.5 kg packs
Cleaning agent	Within the pot life all tools and equipment can be cleaned with water. Partially or completely cured material can only be removed mechanically.
Storage	Can be stored in original sealed packages, protected from UV-exposure, at temperatures between + 1 °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.

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 01/18. 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.