

MC-Montan Injekt DR / DS

Injection resin for flexible sealing and bonding of mountainous zones and ground

Product Properties

- Two-component elastomer resin
- Very good injectivity due to very low viscosity
- Water-supplanting
- Pore-forming, non-foaming
- Complies with building material class B2 in respect of fire behaviour acc. to DIN 4102
- Fulfills DIBt standards for appraisal of the impact of building materials on ground and groundwater

Areas of Application

- Sealing of chasms and cavities in mountainous zones, loose rock, soil, building ground and structures against pressurized water in building pit closures, tunnel- and special underground constructions
- Stabilising of building ground against the risk of ground seepage
- Sealing of voids and cracks in structures made of concrete and masonry
- Sealing of running joints in structures
- REACH-assessed exposure scenarios: long-term water-contact, periodical inhalation, application

Application

Product description

MC-Montan Injekt DR and MC-Montan Injekt DS are two-component injection resins curing to waterproof, flexible resin bodies. MC-Montan Injekt DR has a rapid reaction, MC-Montan Injekt DS has a slow reaction. Base and hardener components of both systems may be combined with each other. Application times between 2 and 80 minutes may be adjusted by mixing of component A. Both resins may be injected into rocks, building ground and structures both with and without exposure to water. In contact or when mixed with water closed-cell, waterproof pores are forming which increase the compressibility.

Preparative measures

Prior to application the injectivity of the rocks, building ground or structure must be checked and an injection concept is to be defined.

Injection packers / Injection lances

Placing of suitable packers/lances with adequate inner diameter. Arrangement and insertion depth of packers/lances must comply with the injection concept.

Mixing of components

Mixing of components A and B of MC-Montan Injekt DR is carried out during application in the mixing-head of the 2-component injection pump

(spiral mixers min. 30 segments, grid mixers min. 10 elements). MC-Montan Injekt DS can be mixed until homogeneous and streak-free prior to the 1-component application.

Injection

Injection of rapid reacting resins is carried out using a 2-component injection pump with sufficient pressure and discharge capacity (e.g. MC-I 700). Slowly reacting resins (> 30 min) can be injected one-component using the MC-I 510 injection pump. Injection packers and lances must be suitable for the scheduled injection pressure, e.g. MC-Injektionspacker LS 18 or MC-Injektionspacker DS 14. The packers may be combined with pile lances. For reaction of the resin a temperature of the ground/structure of at least + 6 °C is required during injection and curing.

Cleaning of equipment

In case of short interruption of work the mixing head of the injection pump may be flushed with component A. Prior to longer interruption of work the complete injection pump must be flushed thoroughly with MC-Verdünnung PU. For any further details please see the user manual of the injection pump.

Partially or completely cured material can only be removed mechanically.

Technical Data for MC-Montan Injekt DR / DS

Characteristic	Unit	Value*	Comments
Density	kg/dm ³	approx. 1.04	DIN EN ISO 2811-1
Mixing ratio	VT	1 : 1	component A : component B
Viscosity	mPa·s	55 ± 5	DIN EN ISO 3219
Expansion with water	-	1.04	DIN EN 14406
Glass transition temperature	°C	- 34	DIN EN 12614
Application time			ASTM D7/487
MC-Montan Injekt DR	min	approx 4	
MC-Montan Injekt DS	min	approx. 100	
Application temperature	°C	+ 6 to + 45 + 6 to + 30	Temperature of substrate/ground Temperature of air/material

* All technical data are lab values and relate to + 21 ± 2 °C and 60 ± 10 % relative humidity.

Product Characteristics MC-Montan Injekt DR / DS

Equipment cleaning	MC-Verdünnung PU Water or water-based cleaning agents must not be used under any circumstance.		
Colour	component A: yellow component B: brown mixture: light-brown		
Delivery	MC-Montan Injekt DR:	component A: 20 l, 200 l, 1000 l	
	MC-Montan Injekt DS:	component A: 20 l, 200 l, 1000 l	
	MC-Montan Injekt D:	component B: 20 l, 200 l, 1000 l	
Storage	Can be stored in original sealed packages at temperatures between + 5 °C and + 25 °C in dry conditions for at least one year. Protect from frost! 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 07/17. 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.