

# MC-Montan Injekt DR / DS

# Ductile-elastically sealing injection resin for rock, subsoil, concrete

## **Product Properties**

- Particularly low-viscosity polymer reactive injection resin
- Low surface tension
- Excellent injectivity
- · Variably adjustable reaction time
- Water displacing
- Forming watertight pore structure, non-foaming
- Durable water tightness against high pressing water
- High ductility
- High chemical resistance
- · General building inspectorate approval for injection into soil and groundwater of the DIBt
- REACH-assessed exposure scenarios: long-term water contact, periodical inhalation, application

### **Areas of Application**

- Ductile-elastic sealing and filling of gaps, joints and cavities in, underground building construction and tunneling under dry, water-bearing and pressurized water conditions
- Subsoil sealing and subsoil consolidation
- Injection of water structures and dams, drinking and waste water structures
- Sealing of pipe and liner connections to manhole structures of wastewater engineering infrastructure
- · Sealing injection of leaks in manhole ring joints, pipe penetrations, socket joints

#### Application

#### **Product description**

MC-Montan Injekt DR / DS is a modular, two component polymer reactive injection resin system. MC-Montan Injekt DR is fast reacting; MC-Montan Injekt DS reacts slower. Both resins can be injected individually or in combination into subsoil or structures with or without water conditions. The resins do not foam in contact or mixed with water. Both fulfill high water hygienic requirements.

#### Preparation

Prior to injection, an examination of the structure to be injected must be carried out according to the state of the art and engineering rules, and an injection concept must be defined.

#### Mixing

MC-Montan Injekt DR / DS respectively to mix as component A with MC-Montan Inject D as component B. In case of regular 2-component injection the components are mixed in the mixing head of the 2-component injection pump (mixing section 20 cm grid mixers). In case of flowing water or low temperatures MC-Montan Injekt DR can directly be used. The reaction time can be prolonged by partially adding the MC-Montan Injekt DS component A into MC-Montan Injekt DR component A.

#### Injection

Injection is carried out with the MC-I 700 (2-component injection pump) and injection packers. For injection into subsoil lances are recommended, for structural components MC- Injektionspacker LS 18 and MC-Injektionspacker DS 14 are recommend.

Injection must be stopped in case of structure temperatures of < 5 °C or > 40 °C. For detailed information on application please see the MC method statement for MC-Montan Injekt DR / DS.

#### Machine cleaning

Within the application time all tools and equipment can be cleaned with MC-Verdünnung PU (Thinner). Partially or completely cured material can only be removed mechanically.



Technical Data for MC-Montan Injekt DR / DS			
Characteristic	Unit	Value*	Comments
Mixing ratio	p.b.v. p.b.w.	1 : 1 100 : 111	component A : component B component A : component B
Density	kg/dm³	approx. 1.04	DIN 53 479
Viscosity	mPa⋅s	approx. 55	EN ISO 3219
Surface tension	mN/m	34.651	Krüss Processor Tensiometer K100
Application time MC-Montan Injekt DS MC-Montan Injekt DR	minutes minutes	approx. 35 approx. 2	EN 1504-5 (reaching 1.000 mPa⋅s) EN 1504-5 (reaching 1.000 mPa⋅s)
Reaction time MC-Montan Injekt DS MC-Montan Injekt DR	minutes minutes	approx. 100 approx. 4	ASTM D 7/487 ASTM D 7/487
Expansion in contact with water	%	approx. 4	EN 14 406
Application temperature	°C	5 - 40	Substrate/structure temperature
Water tightness	bar	7	EN 14068
Ductility in crack	%	approx. 11 - 17	EN 12618-2
Free lengthening	%	approx. 100	DIN 53 455
Adhesive tensile-strength	N/mm <sup>2</sup>	approx. 0.6	EN 12618-1, concrete dry / moist
Glass transition temperature	°C	- 34	EN 12 614

\* All technical data are lab values and relate to + 21 ± 2 °C and 50 % relative humidity.

Product Characteristics MC-Montan Injekt DR / DS		
Colour	light-brown	
Delivery	20 I for component A and B each	
Storage	Can be stored in original sealed packages at temperatures between + 5 °C and + 35 °C in dry conditions for at least 18 months. The same requirements are valid for transport.	
Cleaning agent	MC-Verdünnung PU (thinner)	
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 05/19. 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.