

MC-Montan Injekt DR

Ductile-elastic, durable sealing injection resin of rock, foundation soil and civil engineering structures



PRODUCT PROPERTIES

- Particularly low-viscosity polyurethane-based elastomer resin
- Very good injectability
- High penetration activity due to low surface tension
- Water-displacing, no foam formation
- Variable control of reaction times
- Complete curing under dynamic loading
- High elasticity
- Can be combined with cement suspension (hybrid injection)
- Corresponds to fire class B2 according to DIN 4102 in the injection medium
- Durable water impermeability
- CE conformity according to EN 1504-5: CE U(D2) W(1) (1/2/3/4) (5/40)
- General building authority approval issued by the DIBt for injection into soil and groundwater
- REACH exposure: water contact permanent, inhalation periodic, processing and application
- Environmental Product Declaration EPD

AREAS OF APPLICATION

- Ductile, flexible filler and sealant of crevices, joints and cavities in civil engineering and tunnel construction under dry, water-bearing and pressurised water-bearing conditions
- Waterproofing and consolidating loose rock
- Waterproofing of hydraulic structures and dams, drinking water and sewage structures
- Waterproofing of pipe and liner connections to manhole/shaft structures of sewerage infrastructure
- Sealing injection of manhole ring joints, pipe penetrations, socket joints

APPLICATION ADVICE

Preparatory measures: Prior to injection, an investigation of the rock or structure and of any leaks must be carried out according to the state of the art and the rules of technology, and an injection concept must be planned. Packers must be set before injection. A trial injection is recommended.

Mixing the components: Components A and B of MC-Montan Injekt DR are mixed as they pass through the mixing head of the injection pump (mixing distance ≥ 20 cm inline static mixer). Only batches of the components produced at the same time may be mixed with one another.

The working time of the mixed resin depends on the ambient temperature. The working time can be extended by cooling the resin components and the resin mixture.

Delayed reaction: The reaction time of MC-Montan Injekt DR can be extended by mixing component A of MC-Montan Injekt DR with component A of MC-Montan Injekt DS. The slowest setting achievable is governed by the reaction time of the MC-Montan Injekt DS component.

Injection: Injection is performed with the two components being mixed as they are dispensed by the MC-I 700.

Lances are recommended for injection into rock or subsoil.
MC-Bore Packer LS 18 packers are recommended for injection into building components.

Application work should cease once component/substrate temperatures fall below 5 °C.

Ensure compliance with the information given in the specifications and the Safety Data Sheets.

Equipment cleaning: Within the working time of the resin, all solvent-resistant tools can be cleaned with MC-Cleaner eco or thinner product MC-Verdünnung PU. Material that has reacted or set will need to be removed mechanically.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

| Characteristic | Unit | Value | Comments |
|------------------------------|--------------------|-----------------|-----------------------------------|
| Mixing ratio | parts by volume | 1 : 1 | comp. A : comp. B |
| | mass fractions | 100 : 111 | comp. A : comp. B |
| Density | kg/dm ³ | | DIN 53479 |
| | | approx. 1.04 | mix |
| | | approx. 0.98 | component A |
| | | approx. 1.09 | component B |
| Viscosity | mPa·s | approx. 55 | EN ISO 3219 |
| Working time | minutes | approx. 4 | |
| Application conditions | °C | 5 - 40 | component and subsoil temperature |
| Strain (free) | % | approx. 100 | EN ISO 527-1 |
| Strain (in the crack) | % | approx. 11 - 17 | EN 12618-2 |
| Strain (with water) | % | approx. 4 | EN 14 406 |
| Tensile strength | N/mm ² | approx. 0.6 | EN 12618-1 |
| Surface tension | mN/m | 34.651 | Krüss Processor, Tensiometer K100 |
| Reaction time, pot life | minutes | | ASTM D7487-13 |
| MC-Montan Injekt DR | | approx. 4 | |
| MC-Montan Injekt DS | | approx. 100 | |
| Volume change (with water) | % | approx. 4 | |
| Pressure water tightness | bar | 7 | EN 14068 |
| Glass transition temperature | °C | -34 | EN ISO 11357-2 |

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

| | |
|--------------------------|--|
| colour shade | light brown |
| equipment cleaning agent | MC-Verdünnung PU (thinner), under no circumstances should water or aqueous cleaning agents be used |
| delivery form | 20 l contents per component A and B |
| Storage | Can be stored in original sealed packages at temperatures between 5°C and 35°C in dry conditions for at least 18 months. |
| packaging disposal | Make sure single-use containers are completely empty. Ensure compliance with our information leaflet "Return of Emptied Transportation and Sale Packaging". We will be glad to send you this on request. |

Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : PU40

Note: The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2100005119]