

MC-Montan Injekt FF

Injection rigid foam for filling cavities, for consolidating and sealing foundation soil and rock



PRODUCT PROPERTIES

- Low-viscosity polyurethane-based duromer resin
- Volume increase with limited foaming without water contact
- Water-displacing
- Fast curing
- Water impermeability
- Corresponds to fire class B2 according to DIN 4102 in the injection medium
- No lasting effects on soil and groundwater according to DIBt test criteria
- Tested for traffic areas in concrete construction according to ZTV TL BEB-Stb
- REACH exposure: water contact permanent, inhalation periodic, processing and application
- Environmental Product Declaration EPD

AREAS OF APPLICATION

- Increasing the load-bearing capacity of the building site under floor slabs and foundations
- Fixing of concrete slabs, especially on dynamically highly stressed surfaces
- Leveling consolidating injections of floor slabs and foundations
- Sealing and reinforcing of void-rich/cracked structures made of concrete and masonry
- Sealing of rigid joints in concrete buildings
- Sealing and stabilizing of construction pit enclosures

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 FF are mixed as they pass through the mixing head of the injection pump (mixing distance ≥ 20 cm inline static mixer).

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.

Reaction acceleration: The reaction of MC-Montan Injekt FF can be shortened with the catalyst MC-KAT 27 (up to 1 % in component A).

Injection: Injection is performed with the two components being mixed as they are dispensed by the MC-I 710.

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 : 122	comp. A : comp. B
Density	kg/dm ³		EN ISO 2811-1
		approx. 1.13	mixture
		approx. 1.005	component A
		approx. 1.235	component B
Viscosity (dynamic)	mPa·s		EN ISO 3219
		approx. 460	component A
		approx. 340	component B
Working time	minutes	approx. 1	ASTM D7487
Application conditions	°C	5 - 40	component and subsoil temperature
Compressive stress	MPa		EN ISO 604
		1 h	approx. 37.3
		8 h	approx. 41
		7 d	approx. 48.7
Compressive stress		approx. 8.9	with a density of 0.4 g/cm ³
Flexural strength	MPa	approx. 56.1	EN 196-1
Expansion factor		approx. 5.5	per TL BEB-Stb (Table 27)

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

Colour	brown
Equipment cleaning agent	MC-Verdünnung PU (thinner), under no circumstances should water or aqueous cleaning agents be used
Delivery form	MC-Montan Injekt FF: 1000 l container, 20 l canister MC-Montan Injekt F: 1000 l container, 20 l canister MC-KAT 27; Bottle of 400 ml with 5 pieces in a box
Storage	Can be stored in original sealed packages at temperatures between 5°C and 40°C in dry conditions for at least 18 months.
Packaging disposal	Make sure single-use containers are completely empty.

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. [2300018168]