

MC-Injekt 2300 top

Ductile and flexible injection resin for the durable waterproofing of concrete, masonry and foundation soil



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
- 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 substances resistant to chemical attack in LAU facilities (facilities for the storage, filling and handling of liquid substances hazardous to water)
- 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 cracks, construction joints and cavities in concrete and masonry under dry, water-bearing and pressurised water-bearing conditions
- Injection work in accordance with EN 1504-5, DAfStb (repair guidelines), ZTV-ING (contract guidelines for civil engineering works)
- Grouting of injection tubes and hoses
- Waterproofing of hydraulic structures
- Waterproofing of masonry against moisture penetration and rising damp
- 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 structure and 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-Injekt 2300 top should be homogeneously mixed with each other in the specified mixing ratio with slowly rotating stirring paddles or similar for subsequent one-component injection. Only batches of the components produced at the same time may be mixed with one another. The mixing time is 1 minute.

Mixed reactive resin must be repotted into a clean empty container or into a container in which mixed resin of the same quality has been stored. Repotting is completed once the resin is transferred into the reservoir of an injection pump and briefly remixed.

The pot life/working time of the mixed resin depends on the quantity involved and the prevailing ambient temperature. The working time can be extended by cooling the resin components and the resin mixture. With two-component application, the working time is longer due to the small amount of mixed resin.

In the case of two-component application, the components 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. There is no need to stock mixed resins. The pot life is thus extended.

Reaction acceleration: The reaction time of MC-Injekt 2300 top can be shortened by mixing component A of MC-Injekt 2300 top with component A of MC-Injekt 2300 rapid. The fastest setting achievable is governed by the reaction time of the MC-Injekt 2300 rapid component.

Injection: Injection is performed either on a 1-component basis with the MC-I 520 or with the 2 components being mixed as they are dispensed by the MC-I 710.

APPLICATION ADVICE

MC-Bore Packer DS 14 bore packers are recommended for injection into components.

Strongly flowing water can be stopped beforehand with MC-Injekt 2133. This is immediately followed by applying a permanently sealing injection of MC-Injekt 2300 top.

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, all solvent-resistant equipment 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	mixture
		approx. 0.98	component A
		approx. 1.09	component B
Viscosity	mPa·s	approx. 55	EN ISO 3219
Working time	minutes	approx. 35	EN 1504-5 (up to 1,000 mPa·s)
Application conditions	°C	5 - 40	component and subsoil temperature
Strain (free)	%	approx. 100	EN ISO 527
Strain (in the crack)	%	approx. 11 - 17	EN 12618-2
Volume change (increase with water)	%	approx. 4	EN 14 406
Pressure water tightness	bar	approx. 7	EN 14068
Tensile strength	N/mm ²		EN 12618-1
		approx. 0.46 - 1.31	concrete dry, moist
Surface tension	mN/m	34.651	Krüss Processor, Tensiometer K100
Reaction time, pot life	minutes	approx. 90	ASTM D7487-13
Glass transition temperature	°C	-34.2	EN ISO 11357-2

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

Colour	light brown
Equipment cleaning agent	MC-Verdünnung PU (thinner), under no circumstances should water or aqueous cleaning agents be used
Delivery form	Box of 6 x 1 l packs Canister with 5 l content per component A and B Canister with 10 l content per component A and B Canister with 20 l content per component A and B
Storage	Can be stored in original sealed packages at temperatures between 5°C and 30°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. [2400020523]