MC-Injekt GL-95 TX

Swelling, flexible, waterproofing acrylate gel sealant for injection in concrete, masonry and foundation soil



PRODUCT PROPERTIES

- Low-viscosity, high-solids acrylic-based hydrogel
- Very good injectability
- Readily controllable injection path propagation thanks to controllable reaction time
- Very low application temperature
- Reliable sealing/waterproofing due to high elasticity and good swelling capacity
- Durably water-impermeable in moist media
- Corresponds to fire class B2 according to DIN 4102 in the injection medium
- Fulfils the UBA (German environmental agency) guidelines for sealants in contact with potable water
- Meets the KTW-BWGL guideline for seals in contact with drinking water
- High chemical resistance especially in highly alkaline environments
- CE conformity according to EN 1504-5: CE U(S2) W(2/3/4) (1/40)
- REACH exposure: water contact permanent, inhalation periodic, processing and application
- Environmental Product Declaration EPD

AREAS OF APPLICATION

- Swelling flexible filling sealant for cracks, construction joints, expansion joints and cavities in permanently damp concrete and masonry
- Subsequent vertical sealing of masonry
- Subsequent formation of a horizontal barrier/DPC in masonry
- Injection of waterproofing membrane into interstitial spaces between buildings
- Injection of waterproofing membrane into foundation soil (curtain injection)
- Injection of construction joints via injection tubes/hoses

APPLICATION ADVICE

Preparatory measures: Prior to injection, an investigation of the 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-Injekt GL-95 TX are prepared from their respective subcomponents in the specified mixing ratio. Component A is mixed from subcomponents A1, A2 and A3. To do this, pour component A2 and A3 into the container of component A1 and stir energetically with a wooden paddle. Component B is dissolved in B1 and mixed with a wooden paddle. The reaction times of MC-Injekt GL-95 TX depend on the volume of component B added to B1.

Mixing of the components A and B thus prepared takes place during injection: The components are mixed as they pass through the mixing head of the MC-I 710 injection pump (mixing distance \geq 10 cm inline static mixer).

Reaction time with addition of component B in 25,8 kg or 103,2 kg of B1

%	25,8 kg B1	103,2 kg B1	reaction time	
approx. 0,2 %	0,05 kg	0,2 kg	approx. 125 s	
approx. 0,5 %	0,129 kg	0,5 kg	approx. 65 s	
approx. 1 %	0,25 kg	1,0 kg	approx. 40 s	
approx. 2 %	0,5 kg	2,0 kg	approx. 25 s	
approx. 4 %	1,0 kg	4,1 kg	approx. 14 s	

Delayed reaction: The reaction time of MC-Injekt GL-95 TX can be extended with MC-Injekt Retarder GL. The retarder is added to the ready-mixed component A. The amount added determines the delayed reaction time. This mixture can be used within 2 hours. When using the retarder, the concentration of component B of 0.5% in component B1 must be adhered to.

APPLICATION ADVICE

MC-Injekt Retarder GL in 120 kg component A	reaction time at 20 °C	
1 kg	approx. 80 s	
2 kg	approx. 3 min	
3 kg	approx. 15 min	
4 kg	approx. 28 min	

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

MC-Hammer Packer LP 18 or MC-Hammer Packer LP 12 packers are recommended for injection into building components.

MC-Bore Packer LS 18 packers or injection lances are recommended for injection into foundation soil.

Application work should cease once component/subsoil temperatures fall below 1 °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 tools can be cleaned with water or air. Material that has reacted or set will need to be removed mechanically.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments	
Mixing ratio	parts by vol-	1:1	comp. A: comp. B in solution	
	ume			
	mass frac- tions			
Canister	uono	27.6 : 0.5 : 2	comp. A1 : comp. A2 : comp. A3	
			Comp. B1 : Comp. B (0.05 – 1.0 kg)	
Drum		110 : 2 : 8	comp. A1 : comp. A2 : comp. A3	
			comp. B1 : comp. B (0.2 – 4.1 kg)	
Density	kg/dm³		DIN 53479	
		approx. 1.1	mixture	
		approx. 1.2	component A1	
		approx. 0.97	component A2	
		approx. 1.06	Component A3	
		approx. 1.2 - 1.5	comp. B (bulk density)	
		approx. 1.04	component B1	
Viscosity	mPa·s	approx. 40	EN ISO 3219	
Working time	seconds	14 - 125		
Application conditions	°C	1 - 40	component and subsoil temperature	
Strain	%	approx. 150	EN ISO 527-4	
PH value		approx. 9	cured product	
Swelling dimension	%	approx. 40	water storage at 20 °C	
Ultimate elongation	%	approx. 300	DIN 52 455-1	
	All technical	values are laboratory	y results determined at 21°C ±2°C and 50% relative humidity.	
Colour	light blue			
Equipment cleaning agent	water			
Delivery form	MC-Injekt GL-95, component A1, 27.6 kg and 110 kg containers			
	MC-Injekt GL-95, component A2, box of 4 x 0.5 kg containers			
	MC-Injekt GL-95, component A3, 2 kg and 8 kg containers MC-Injekt GL-B, component B, box of 4 x 0.5 kg containers			
	MC-Injekt GL-B, component B1, 25.8 kg and 103.2 kg containers			
	MC-Injekt Retarder GL, 5 kg container			
Storage	Can be stored in original sealed packages at temperatures between 5°C and 25°C in dry conditions for at least 12 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.

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. [2400020526]