

MC-Injekt 2188

1-component, water-reactive fast-foaming MDI-based injection resin with integrated catalyst for sealing measures

Product Properties

- Water-reactive fast foaming 1-component polyurethane
- Stable and non-shrinking foam structure
- High foaming rate
- Free of phthalate plasticizers
- Free of solvents like acetone
- No strong odor
- No release of toxic substances into water and soil
- Easy application by means of a 1-component pump

Areas of Application

- Sealing of below-grade structures - tunnels, basements, diaphragm/sheet pile/secant pile walls
- Active sealing of anchor heads
- Sealing of water-bearing cracks, joints and cavities; injection against flowing water
- REACH-assessed exposure scenarios for periodical inhalation, application

Application

General information

MC-Injekt 2188 is a 1-component injection resin with integrated catalyst which needs water in order to trigger its chemical reaction.

Basically, it may be injected into concrete and masonry structures as well as into rocks and building ground both with and without exposure to water. However, MC-Injekt 2188 needs a minimum water amount of 10% to react with in order to develop a non-shrink foam structure. An injection concept is to be defined in accordance with DIN EN 12715.

MC-Injekt 2188 is suitable as an active sealing of anchor heads, where anchors pass through the retaining walls. The polymerization of MC-Injekt 2188 is regulated automatically due to the amount and pressure of water.

The higher the quantity / pressure of water the faster the reaction of MC-Injekt 2188.

Application

Packers with adequate weir openings (≥ 1.5 mm) have to be placed in a proper way. The injection work is carried out by means of a 1-component injection pump (e.g. MC-I 510) with

sufficient pressure.

MC-Injekt 2188 poured into the hopper of the injection pump may react with air humidity and form a skin on the top. The skin prevents the liquid material underneath from further unwanted reaction.

The Injection works should be carried out in steps depending on site conditions to allow the foam enough time to react.

Cleaning of tools and machines

In case of any longer interruption of work the injection-pump must be flushed thoroughly with suitable cleaning agents, e.g. MC-Thinner PU to prevent foaming in contact with humidity. Water or water-based cleaning agents must not be used under any circumstances.

We recommend maintaining the pump with oil after finishing the injection works. For any further details please refer to the manual of the injection pump.

Partially or completely cured material can only be removed mechanically.



Technical Data of MC-Injekt 2188

Characteristic	Unit	Value*	Comments
Density	kg/dm ³	1,11	DIN 53479
Viscosity	mPa*s	490 ± 10	DIN EN ISO 3219
Free foaming rate	%	4000	reaction with 10% water / ASTM D471 16a
Start and end of foaming	seconds	15 - 90	reaction with 10% water
Application time	hours	6 - 8	
Application temperature	°C	8 - 40	Ambient and substrate temperature

* All technical values relate to 23 ± 2 °C

Product Characteristics of MC-Injekt 2188

Colour	Yellowish
Cleaning agent	MC-Thinner PU Water or water-based cleaning agents must not be used under any circumstances
Packaging	18 kg metal container
Storage conditions	Can be stored in original sealed packs at temperatures between +5 and 25 °C in dry conditions for at least 1 year. The same requirements are valid for transport.
Disposal	Packs must be emptied

Note:

The information on this data sheet is based on our experiences and correct to the best of 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 02/20. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If technically revised new edition is issued, this edition becomes invalid.