

MC-Injekt 2188 Flex

Flexible water-reactive MDI-based injection foam for durable sealing measures.

- PRODUCT DESCRIPTION:**
- **MC-Injekt 2188 flex** is a 1-component injection resin with integrated catalyst. In contact with water or moisture, it will react to become a flexible and durable foam. The resin can be injected into concrete and masonry structures as well as into soil and rock, both under dry and wet condition.

- PRODUCT PROPERTIES:**
- 1-component MDI-based injection foam.
 - Highly flexible closed-cell structure.
 - Free of phthalate plasticizers.
 - Safe for soil and groundwater.
 - High penetration ability due to sliding effect thanks to the hydrophobic property of the resin.

- AREAS OF APPLICATION:**
- Permanent sealing of water-bearing cracks and cavities, ranging from 0.3 – 5 mm.
 - Sealing of below-grade structures: tunnels, basements, diaphragm/sheet pile/secant pile walls.
 - Grit injection into concrete or masonry structures to seal voids and honeycombs.
 - Repairing of faulty and de-bonded waterproofing membranes by injection into the gap between the membrane and concrete.

- APPLICATION NOTES:**
- **General information:**
 - **MC-Injekt 2188 Flex** is water-reactive and therefore needs water or moisture to trigger its chemical reaction and to drop down its initial viscosity. Dry structures have to be pre-injected with water priorly.
 - Basically, water injection is also dedicated to check the injectability of **MC-Injekt 2188 Flex** into the structure or soil. Due to the hydrophobic property of its initial state, **MC-Injekt 2188 Flex** is able to slide deeply over the wet crack surface.
 - An injection concept is to be defined in accordance with DIN EN 12715.
 - **Application:**
 - Packers (e.g. MC-Injectionpacker DS 14) with adequate weir openings (≥ 2 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 Flex** 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 at temperatures of the structure/ground between 5°C – 40°C.
 - **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 to maintain the pump and injection hoses 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:

Characteristic	Unit	Value	Comments
Density	Kg/dm ³	~ 1.03	DIN 53479
Viscosity	mPa*s	790 ± 10	DIN EN ISO 3219
	mPa*s	210 ± 10	DIN EN ISO 3219 (in contact with water)
Elongation	%	~ 60	DIN 53455, (free elongation)
	%	21 – 39	DIN 12618-2, (elongation in cracks)
Adhesive pull strength	N/mm ²	~ 0.15	DIN EN 12618-1, concrete dry and damp
Foaming rate	%	1000	Free foaming
Start and end of foaming	second	25/200	Starting when in contact with water
Water demand	%	1.3	
Application temperature	°C	5-40	Ambient and substrate temperature

**Specifications are based on laboratory conditions (21°C ± 2 and 65% relative humidity) and are subject to change under actual application conditions. To determine specifications under specific conditions, preliminary conformance tests should be carried out under actual construction conditions.*

PRODUCT CHARACTERISTICS:

Color	Yellowish
Packaging	18kg/metal barrel
Cleaning agent	MC-Thinner PU Water or water-based cleaning agents must not be used under any circumstances.
Shelf-life and storage	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	Containers must be emptied before disposal.

Note: The information provided here is based on our experience and correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual building projects, to the specific application and to non-standard local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. Given these preconditions we shall be liable for the accuracy of the information given as outlined in our sales and delivery terms and conditions. Recommendations by our employees that deviate from this information are only binding for us if they have been confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be adhered.

Edition **01/2024**. Some technical changes have been made to this print medium. Older editions are invalid and may not be used.