

# MC-Injekt 2188

## Hydrophobic fast-foaming 1-component PU resin for water stopping injection applications.

### PRODUCT DESCRIPTION:

- **MC-Injekt 2188** is a 1-component injection resin with an 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.

### 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.
- REACH-assessed exposure scenarios for periodical inhalation, application.

### 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.

### APPLICATION NOTES:

- **General information:**
  - **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.
  - 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.
  - The higher the quantity/pressure of water the faster the reaction of **MC-Injekt 2188**.
- **Application:**
  - Packers with adequate weir openings ( $\geq 1.5$  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:**

Characteristic	Unit	Value	Comments
Density	Kg/dm <sup>3</sup>	1,11	DIN 53479
Viscosity	mPa*s	490 ± 10	DIN EN ISO 3219
Free foaming rate	%	4000	reaction with 10% water / ASMT 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

*\*Specifications are based on laboratory conditions (21°C ± 2 and 50% 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:**

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