

Mapegel 50

Three-component hydrophile gel for consolidating grounds and for creating barriers through injection in the concrete

WHERE TO USE

- Consolidation of grounds that are not very compact.
- Waterproofing bulkheads by injection.
- Restoration, by injection, of patched damaged waterproofing elements.

Some application examples

- Waterproofing and consolidating "loose grounds".
- Waterproofing hydraulic structures that leak through macro-porosities and micro-cracks.
- Waterproofing dam facings.
- Waterproofing bulkheads.
- Waterproofing tunnels.

TECHNICAL CHARACTERISTICS

Mapegel 50 is a three-component metacrylates based hydrophile gel.

- Part A = a metacrylates water solution (resin);
- Part B = a metacrylates solution (hardener);
- Part C = peroxide salt (accelerator).

Due to its low viscosity, once prepared

Mapegel 50 can easily penetrate through micro-porosities, perfectly sealing the spaces. After it has hardened, **Mapegel 50** is very elastic and has an excellent chemical resistance to the principal organic and inorganic liquids.

RECOMMENDATIONS

Mapegel 50 must not be used in the case of strong water seepage. Use **Foamjet F**, **Foamjet T** or **Resfoam 1KM**.

APPLICATION PROCEDURE

Preparing the product

Pour 20 kg of Part A (resin) into a clean plastic container and, while mixing, add 1 kg of Part B (hardener). Dilute 0.3 kg of Part C (accelerator) with 20 litres of water in a second container. Do not use metal tools for the preparation of the product. If a drill is used it should preferably have plastic paddles, or if manually mixed, use a wooden tool. If the amount of Part B (hardener) or Part C (accelerator) is increased or reduced, the reaction time could change. After their preparation, the solutions are stable for approximately 6-8 hours at +20°C.

Applying the product

Pump the two solutions separately, 1:1 by volume, using a steel pump for two-component products fitted with a special static mixer placed at the nozzle before the injector.

TECHNICAL DATA (typical values)			
PRODUCT IDENTITY			
	Part A	Part B	Part C
Colour:	colourless	colourless	white
Specific gravity at +25°C (kg/dm ³):	1.055 ± 10	0.935 ± 10	–
Freezing point (°C):	–15	–	–
Flash point (°C):	not obtained	> 170	not obtained
pH:	6 ± 1	10.2 ± 0.5	–
Viscosity at +25°C (mPa·s):	5	1-2	solid
CHARACTERISTICS OF THE MIXTURE			
Ratio:	Solution A : Solution B = 1 : 1 by volume		
Temperature (°C):	20	10	
A : B / water : C (by weight):	20 : 1 / 20 : 0.3	20 : 1 / 20 : 0.3	
Begins to gel:	5' ± 30"	7' ± 30"	
Stops gelling:	12' ± 20"	15' ± 1'	
Mixing viscosity (mPa·s):	< 5	< 5	

N.B. The above listed data refer to values obtained in the lab. On site the values could vary due to the exchange of heat between the resin and the surrounding environment. By increasing or reducing the amount of Part B (hardener) or Part C (accelerator), the reaction time could change.

Cleaning

The tools used for injection (pump and branching pipes) must be cleaned with plenty of clean water before the product gels.

CONSUMPTION

Approximately 1 kg/l of cavity.

PACKAGING

21.3 kg units.

- Part A = 20 kg
- Part B = 1 kg
- Part C = 0.3 kg

STORAGE

Store the product in a dry sheltered place in the original sealed packaging at a temperature between +10°C and +30°C. Store Part C far from heat sources and flammable products.

SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

Part A and Part B could be irritant to the eyes, skin and respiratory tract. If Part C comes in contact with combustible products, it could trigger flames, furthermore, it irritates the eyes and skin.

Wear gloves, goggles and a mask with an activated carbon filter while preparing and applying the product.
In case of contact with the skin or eyes, wash with plenty of clean water and consult a doctor. Before using the product, it is recommended to consult the relative safety data sheet.

FOR PROFESSIONALS.

WARNING

N.B. - Although the technical details and recommendations contained in this product report correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to

confirmation after long-term practical applications: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

**All relevant references
of the product are available
upon request**



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