

Low viscous, one-component, MDI-based, polyurethane injection resin for water sealing cracks, big gaps, or water leaks with high flow or pressure. Reacts with water, forming a semi-rigid foam.



APPLICATIONS

- Water sealing of cracks and big gaps in walls, floors, concrete constructions, underground structures, ...that are not liable to settings and movements.
- Used as waterstop for leakages or active water leaks with high flow and/or high hydrostatic pressure.

PROPERTIES

- Reacts with water.
- Forms semi-rigid foam.
- Penetrates deep in fine cracks.
- Does not shrink after curing.
- Free expansion: min 1700 % to 2200 %.
- Good chemical resistance.
- Excellent adhesion on mineral building materials (concrete, cement, brick), metal and certain plastics.
- The reaction speed can be adjusted by varying the amount of catalyst.

PACKAGING

RESIN	CATALYST
25 kg	2.3 kg

TECHNICAL DATA (Typical values)

Colour	Dark brown
Free expansion	1700 % - 2200 %

	RESIN	CATALYST
Viscosity (20 °C)	95 mPas	45 mPas
Density (20 °C)	1.10 - 1.20 g/cm ³	+/- 0.923 g/cm ³

REACTION TIMES AT 20 °C

% CATALYST	START REACTION	END REACTION
2 %	44 sec	3 min 30 sec
6 %	19 sec	1 min 17 sec
9 %	13 sec	54 sec

The reaction time is controlled by adapting the amount of catalyst.

Method: 65 gr resin + catalyst + 12 gr water



PROCESSING

1 PREPARATION

- The PC® Leakinject Uni 6816 E components are supplied ready to use.
- The reaction time depends on the temperature of the material, the structure of the construction and the possible amount of water present. Higher temperatures will speed up the reaction time and lower temperatures will slow it down.
- Add the catalyst to the resin, according to the desired reaction time, and mix thoroughly.
- Inject the mixture with a single component pump (manual, electric, pneumatic).
- Verify that pump and equipment are clean and that no residues from previous injection works are left.
- Check the quality of the concrete, as injection implicates pressure.

2 DRILL HOLES AND PACKERS

- Determine the type and dimensions of the packers according to the pump type, plate thickness and injection type.
- Make the crack visible down to the structural concrete so that the drilling patterns can be determined.
- If reinforcement steel is present, try to locate it and plan the drilling pattern so that the reinforcement is not pierced.
- Drill the holes at an angle of about 45° or less and in the direction of the crack. Make sure the bore crosses the crack.
- The distance of the drilled holes depends on the width of the crack.
- Place the packer in the drill hole.

💡 PC® leakinject UNI 6816 E needs contact with water to react.

3 INJECTION POLYURETHANE RESIN

- Prepare the pump to start the injection.
- The injection pressure varies depending on the structure and size of the crack.
- Begin the injection at the lowest point of the crack.
- Continue to inject until the resin leaks from the adjacent packer(s). This is necessary to achieve an even material distribution.
- Stop pumping, disconnect and continue to the next packer.
- Continue the procedure until the crack is completely filled.

4 CLEANING

- Clean the pump and equipment with PC® Ecoclean every time there is a stop of more than 15 minutes, and at the end of the injection works.
- When the cleaning agent comes out of the pipes, flush with a sufficient amount of cleaning agent.
- For the removal of cured polyurethane residues, use PC® PU cleaner.



STORAGE

Storage:

In a dry place between +10 °C and +30 °C.

Shelf life:

12 months after production date in the original, unopened and undamaged packaging. Once opened, the operating life of the product reduces very quickly.

PRECAUTIONS AND SAFETY RECOMMENDATIONS

- Wear safety glasses, gloves and protective clothing. Avoid contact with skin and eyes.
- In the event of contact with eyes: rinse thoroughly with clear water and consult a doctor.
- In the event of skin contact: rinse abundantly with water.
- Mix residues and spilled resin from PC® Leakinject Uni 6816 E with sand and dispose of in accordance with local regulations.
- The resin can react with water or atmospheric humidity to form CO₂ gas. This can build up pressure in a closed package or container that has already been opened.
- Consult the SDS sheet.