

# PC® LEAKINJECT HYDROGEL 6880

**TECHNICAL DATA SHEET** 

**One-component, low** viscous, hydrophilic, MDIbased, polyurethane injection resin. Reacts with water and forms a flexible closed cell foam. Developed for application in wet and dry structures. Does not need a catalyst.



## **APPLICATIONS**

PC Leakinject Hydrogel 6880 can be used as a waterstop for the sealing of pressurized or non-pressurized leakages and water penetrations in walls, floors, concrete constructions, masonry, tunnels, sewer pipes, ... For sealing moist, non-structural cracks, PC Leakinject Hydrogel 6880 must be injected as a 1-component system. For sealing dry, non-structural cracks, PC Leakinject Hydrogel 6880 must be injected as a 2-component system with a for example 1/1 ratio with water.

# **PROPERTIES**

- PC Leakinject Hydrogel 6880 reacts with water, forming a flexible, closed cell polyurethane foam; filling the void and forming a tight, impermeable polyurethane seal.
- Due to its flexibility, the foam absorbs somewhat the movement of the crack.
- Penetrates deep into fine cracks.
- Can be injected pure, directly into a leaking crack, fracture or joint or it can be injected mixed with water (for example in a ratio 1/1)
- PC Leakinject doesn't need any additional catalyst to react with water. PC Leakinject Hydrogel 6880 can be used as it is.
- Reacts with water with the formation of carbon dioxide gas. This gas produces a swelling pressure and the resin expands to a dense, closed cell foam, sealing all water penetrations.
- Free expansion: ± 300% (PC Leakinject Hydrogel 6880 / water = 1 / 1).
- Good adhesion to mineral construction materials such as concrete, masonry, mortar, ....
- Good all-round chemical resistance.

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Release: 31 - 03 - 23







# **TECHNICAL DATA (Typical values)**

Viscosity (5 °C)	635 mPas
Viscosity (10 °C)	443 mPas
Viscosity (15 °C)	375 mPas
Viscosity (20 °C)	310 mPas
Viscosity (25 °C)	280 mPas
Viscosity (30 °C)	230 mPas
Density (20 °C)	1.132 g/cm <sup>3</sup>
Packaging	25 kg
Colour	Yellow- pale brown liquid
Expansion ratio 1/1 with water	± 3V
Application temperature range	5 °C to 30 °C

# **REACTION TIME AT 20 °C\***

RESIN / WATER	START REACTION	END REACTION
65 / 65	20 sec	2 min
65 / 12	22 sec	2 min 20 sec
65 / 2.5	50 sec	7 min

The reaction time decreases with increasing temperature and vice versa.

# **STORAGE**

# Storage:

Store in a dark, dry place between +10 °C and +30 °C. PC® Leakinject Hydrogel 6880 is moisture sensitive.

# Shelf life:

6 months after production date in the original, unopened and undamaged packaging. Once opened, the operating life of the product reduces very quickly and the product should be consumed as soon as possible. PC Leakinject Hydrogel 6880 is moisture sensitive.

### **PROCESSING**

Before usage, PC® Leakinject Hydrogel 6880 should be shaken in order to achieve a homogeneous material. The product must not be thinned with solvents or plasticisers. The product PC® Leakinject Hydrogel 6880 must be used as it is.

PC® Leakinject Hydrogel 6880 can be injected by two methods:

- Injection with a one-component, high pressure injection pump: the PC® Leakinject Hydrogel 6880 resin will react with the water in the wet structure and will foam as tabled above.
- Injection with a two-component, high pressure injection pump: the PC® Leakinject Hydrogel 6880 resin is injected in a, for example, 1/1 ratio with water in the dry structure and will foam as tabled above.

Inject PC® Leakinject Hydrogel 6880 continuously into the crack. PC® Leakinject Hydrogel 6880 reacts as soon as it is in contact with water, sealing cracks and blocking water seepage. In the absence of water, PC® Leakinject Hydrogel 6880 does not expand and continues to penetrate into the cracks. However, the humidity of the air inside the cracks is already enough for the PC® Leakinject Hydrogel 6880 to slowly cure into a flexible, polyurethane seal. Further technical details about the pumps are available on demand.

# PRECAUTIONS AND SAFETY RECOMMENDATIONS

- Wear safety glasses, gloves and protective clothing.
  Avoid contact with skin and eyes.
- In the event of contact with skin or eyes: rinse abundantly with clear water.
- PC® Leakinject Hydrogel 6880 reacts with water. If contaminated by moisture, CO<sub>2</sub> is formed. This may result in excessive gas pressure in the packaging.
- Mix residues from PC® Leakinject Hydrogel 6880 with sand and dispose of in accordance with local regulations.
- Consult the SDS for more information.

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# **CE MARKING**



0749

ECC N.V. Terbekehofdreef 50-52 B-2610 Wilrijk

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0749 - CPD BC2-565-1895-0004-001

## EN 1504-5 U(S1) W(8) (3) (5/30) Concrete injection product for swelling filling of cracks

Watertightness	≥ 2 x 10 <sup>5</sup> Pa
Workability - Percentage of the crack filled	> 95%
Corrosion behaviour	Deemed to have no corrosive effect
Expansion ratio and evolution by water storage	Volume change: ± 8.66 %
Durability - Sensitivity to water	The expansion reaches a constant level
Durability - Sensitivity to wet-drying cycles	No modification of the expansion ratio
Durability - Compatibility with concrete	Pass
Dangerous substances	Comply with 5.4