



EN 1504-5

U(F1)W(1)(1)(5/30)(0)

TECHNICAL DATASHEET

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## PC<sup>®</sup> STRUCTO - INJECT 1380

### Standard epoxy injection resin

#### 1. Description

**PC<sup>®</sup> Structo-Inject 1380** is a 2-component solvent-free injection resin with low viscosity for injection into cracked concrete.

#### 2. Application

**PC<sup>®</sup> Structo-Inject 1380** is the standard injection resin and is used for structural repair of cracks in concrete pillars, beams, wooden spans, anchoring threaded rods in concrete, cracks in masonry, ...

#### 3. Characteristics

- Low viscosity
- Good penetration, even in hairline cracks
- Very good adhesion to concrete, wood, metal... also in unfavourable conditions such as the combination of low temperatures and frost.
- High mechanical characteristics
- Fast-hardening

#### 4. Technical data (typical values)

- A-component:
  - Appearance: yellow transparent liquid
  - Viscosity (20 °C): 600 mPas
  - Density: 1.156 g/ml
- B-component:
  - Appearance: red liquid
  - Viscosity (20 °C): 660 mPas
  - Density: 1.058 g/ml
- Mixture:
  - Appearance: red liquid
  - Initial viscosity (20 °C): 620 mPas
  - Density: 1.121 g/ml
- Density of the cured material : 1.135 g/cm<sup>3</sup>
- Evaluation of the reactivity at 20 °C: time needed for a mixture of 600 g PC<sup>®</sup> Structo-Inject 1380 A and 300 g PC<sup>®</sup> Structo-Inject 1380 B to rise from 20 °C to 40 °C: 25 minutes
- Mixing ratio: 2 kg A / 1 kg B
- Compression strength (EN 12190, after 7 d at 20 °C): 97 N/mm<sup>2</sup>
- Modulus of elasticity (DIN 53452, after 7 d at 20 °C): 2596 MPa
- Flexural strength (DIN 53452, after 7 d at 20 °C): 82.3 N/mm<sup>2</sup>
- Tensile strength (EN ISO 527, after 7 d at 20 °C): 59.1 N/mm<sup>2</sup>
- Shrinkage in volume (EN 12617-2): 2.61%
- Injectability into a dry sand column (EN 1771, 0.1 mm - 0.3 mm): easy to inject

- Adhesion of the injected product with and without temperature transformation: tensile strength of the adhesion (EN 12618-2): cohesive break in concrete
- Adhesion of the injected product with and without temperature transformation: methode of the slant shear strength (EN 12618-3): monolithic failure of in the substrate
- Adhesion to concrete (EN 1542): > 3.0 N/mm<sup>2</sup> (rupture in concrete)
- Glass transition temperature (EN 12614): 64.2 °C
- Consumption : depending on the substrate to be injected
- Application temperature: minimum 5 °C, maximum 30 °C (both ambient as substrate)
- Shelf life: 24 months after production date in the original, unopened and undamaged packaging. **PC<sup>®</sup> Structo-Inject 1380** has to be stored in a dry place between 10 °C and 30 °C.

### 5. Processing

An injection device that respects the mixing ratio of the components A/B = 2/1 should be used. The crack should be sealed with quick-fixing mortar and equipped with injection tubes. When the quick-fixing mortar has hardened sufficiently the injection under pressure with **PC<sup>®</sup> Structo-Inject 1380** can start. The injection is done with a 2-component pump with a mixing ratio of 2/1. Inject up to pressures of ± 8-10 bars.

### 6. Packaging

- A-component: 2 x 10 kg
- B-comonent: 10 kg
- Weigth of the mixture: 30


### 7. Cleaning

Unreacted product can be removed with acetone or with the cleaning agent PC<sup>®</sup> 5900.

### 8. Precautions and safety recommendations

- Ensure sufficient ventilation while injecting.
- Avoid contact with skin and eyes.
- Wear protective gloves, clothes and glasses.
- Prevent all contact of **PC<sup>®</sup> Structo-Inject 1380** with water.
- See safety data sheet for more information.



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<b>ECC N.V.</b> <b>Terbekehofdreef 50 – 52</b> <b>B-2610 Wilrijk</b>  <b>09</b>  <b>0749 - CPD</b> <b>BC2-565-1895-0004-001</b>	
<b>EN 1504-5</b> <b>Concrete injection product</b> <b>U(F1)W(1)(1)(5/30)(0)</b> <b>Force transmitting filling of cracks</b>	
Adhesion by tensile bond strength Adhesion by slant shear strength Volumetric shrinkage Glass transition temperature Workability  Durability Corrosion behavior Dangerous substances	> 2 N/mm <sup>2</sup> (cohesive failure in the substrate) Monolithic failure  < 3 % > 40 °C Crack width from 0,1 mm Moisture state of the crack: dry Pass Deemed to have no corrosive effect comply with 5.4