



## Technical Data Sheet

# BETOCRETE®-CL170-P

Art.-No. 2 06443

## Crystalline waterproofing admixture with plasticizing effect

<b>CE</b>	
<b>SCHOMBURG GmbH &amp; Co. KG</b> Aquafinstraße 2 - 8 D-32760 Detmold 17 2 06443	
EN 934-2 <b>BETOCRETE-CL-170-P</b> Plasticizer for concrete EN 934-2:T2	
Chloride content	max. 0.10 M.-%
Alkali content	max. 10.5 M.-%
Corrosion behaviour	contains components only from EN 934-1:2008, Annex A. 1
Compressive strength	fulfilled
Reduced water demand	fulfilled
Air content	fulfilled
Dangerous substances	NPD

NPD = „No Performance Determined“

### Areas of application:

BETOCRETE-CL170-P can be applied to all concrete where water penetration should be permanently prevented.

These are for example: Cooling towers at power stations, tanks and containers, retaining basins, swimming pools, parking garages, parking lot levels, foundations, sandwich units, waterproof concrete, sewer channels/manhole access points, tunnels, concrete pipes and everywhere, where watertightness is needed.

BETOCRETE-CL170-P is a liquid admixture for designing a water tight concrete with innovative 2 in 1 technology. Initially it functions chemically and plasticizes the concrete. In the next step, nano-scale crystals are formed in the capillary system by special active catalysts, which become active on contact with water. This forms a concrete which is sustainable and permanently impermeable to water.

- Liquid
- Innovative 2 in 1 technology
- Crystallization of the capillaries
- Water reducing up to 10%
- Crack healing possible for penetrating cracks up to 0.4 mm and for map/pattern cracks up to 0.5 mm
- Improvement of the resistance to freeze/thaw
- Reduction in Chloride migration
- Minimization of maintenance and repair costs
- Time saving
- Simple and assured

### Technical data:

Colour:	colourless, clear
Density (at +20°C):	1.19 g/cm <sup>3</sup>
Application temp.:	+8°C to +40°C
Storage:	frost free, not below +8°C, protected from contamination; 12 months in the original unopened container. Use opened containers promptly.
Packaging:	1,100 kg containers 220 kg drums 25 kg kegs
Water pollution class:	1 (Self classification)

### Concrete requirements:

Minimum cement content:	CEM I	270 kg/m <sup>3</sup>
	CEM II	290 kg/m <sup>3</sup>
	CEM III /A	380 kg/m <sup>3</sup>
Pozzolanic cement with pozzolan content >20%:		300 kg/m <sup>3</sup>
Granulated slag:		max. 100 kg/m <sup>3</sup>
Fly ash:		max. 80 kg/m <sup>3</sup>

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# BETOCRETE®-CL170-P

## Product preparation:

### Dosage:

The required dosage rate is 1.75–2.25% based on CEM weight and is dependent, amongst other criteria, on the concrete formula and the reactivity of the cement. The dosage is to identify with a suitability trial. The following dosage levels have stood the test of time:

w/c value	< 0.4	1.75% based on CEM
	> 0.4–0.5	1.85% based on CEM
	> 0.5–0.55	2.00% based on CEM

Do not exceed the maximum dosage level of 2.25 % based on CEM weight.

For large cement quantities ( $\geq 400 \text{ kg/m}^3$ ) a dosage of  $7 \text{ kg/m}^3$  is sufficient.

### Dosage at concrete plants:

BETOCRETE-CL170-P can be added to the mix water or added to the finished concrete mix.

### Dosage in concrete trucks:

Place all the BETOCRETE-CL170-P into the mixing drum and then mix well for 1 minute per  $\text{m}^3$  of drum contents but for a minimum of 5 minutes and use quickly.

## Advice:

- A storage temperature of  $> 30^\circ\text{C}$  can lead to a brown discoloration of BETOCRETE-CL170-P. This has no influence on the product features.
- BETOCRETE-CL170-P has to be thoroughly mixed after a longer storage period ( $> 2$  months).
- Carry out preliminary trials in accordance with current standards before using BETOCRETE-CL170-P or other types of additives.
- Lignite fly ash is only suitable with restrictions.
- The use of CEM III/B&C cements is excluded.
- The prescribed crack width restrictions given by the Planner/Engineer/Structural Engineer must be respected in all circumstances. Differing interpretations are to be proven with relevant design verification and design suitability.
- Concrete with BETOCRETE-CL170-P must be produced, installed and cured following current valid standards.
- In rare circumstances BETOCRETE-CL170-P may influence the initial set of the concrete. As a system compatible product, RUXOLITH-T5 (VZ) is available to control the concrete.

**Please observe a current valid EU safety data sheet!**