

# BETOCRETE®-CL170-P



Crystalline waterproofing admixture with liquefying properties



Material number	Contents	Unit of quantity	Packaging	Colour
206443001	25	KG	Canister	Colourless
206443002	220	KG	Drum	Colourless
206443003	1100	KG	Container (IBC)	Colourless

### Product features

- Liquid
- Increased active crack healing in concrete
- Concrete plasticiser (BV) per DIN EN 934-2:T2
- Water savings of up to 10 %
- Improves frost resistance and resistance to thaw
- Reduced chloride ion migration
- Suitable for drinking water per DVGW worksheet W-347 and W-270

### Advantages

- Crack healing of surface and continuous cracks up to 0.4 mm possible
- Increase durability of concrete component
- Minimisation of concrete servicing and maintenance costs
- Economic liquid dosing in the concrete plant

### Areas of application

- For the integral crystalline waterproofing of concrete structures
- For foundations and watertight concrete components
- For economic, commercial, sports facilities and housing construction
- For infrastructure, water and wastewater structures
- For in-situ concrete, pre-cast concrete components and shotcrete
- Except for XA3 in accordance with DIN EN 206-1/DIN 1045-2
- BETOCRETE-CL210-WP shows the highest efficacy in exposure class XS

# BETOCRETE®-CL170-P

## Technical Data

### Material properties

Density (spec. weight)	approx. 1.18 g/cm <sup>3</sup>
Alkali content (Na <sub>2</sub> O equivalent)	≤ 10.5 percentage by weight
Chloride content	≤ 0.1 %
Water pollution class (WGK)	1 (Selbsteinstufung)

### Mixing

Mixing time	approx. 45 seconds
Mixing time, mixer truck (transport concrete)	approx. 1 minutes per m <sup>3</sup>

### Application

Application temperature	from 8 °C to 40 °C
Recommended dosing in regards to cement	approx. 1.75 - 2.25 %

## Material consumption

Material consumption rate according to the area of application

The following dosing levels have proven to be successful:

w/c ratio	Dosing level
< 0.4	1.75 % relative to CEM
> 0.4-0.5	1.85 % relative to CEM
> 0.5-0.55	2.00 % relative to CEM

Do not exceed the max. dosing level of 2.25% relative to CEM.  
 For a cement content of ≥400 kg/m<sup>3</sup>, a dosing level of 7.00 kg/m<sup>3</sup> is sufficient.

### Additional technical notes

Requirement for the concrete		
Minimum cement content in kg/m <sup>3</sup>	CEM I	270
	CEM II	290
	CEM III/A	380
Minimum quantities of binders/mixtures in kg/m <sup>3</sup>	Portland cement	270
	Portland cement ≤ 35 % mixed with blast furnace slag, fly ash or pozzolans	290
	Portland cement ≤ 50% mixed with blast furnace slag	380
Maximum additions to the binder in kg/m <sup>3</sup>	Blast furnace slag	100
	Fly ash	80

## Usage

### Dosing in concrete plant

BETOCRETE®-CL170-P can be added with the mixing water or the finished concrete mixture.

### Dosing in mixer truck

1. BETOCRETE®-CL170-P is dosed directly into the mixing drum of the vehicle.
2. The mixing time must be ca. 1 Minuten pro m<sup>3</sup> drum content (however, at least 5 minutes).

# BETOCRETE®-CL170-P

## Storage conditions

### Storage

Store in a frost-free, cool and dry place. At min. 8 - 40 °C for 12 months in the original canister. Promptly use opened canister.

## Disposal

Must not be disposed of in household waste. Do not allow to enter the sewer system.


## Notes

- Stir BETOCRETE®-CL170-P thoroughly after a long storage period (> 1 month).
- BETOCRETE®-CL170-P modified concretes may have crystals on the surface, depending on the composition.
- At storage temperatures > +30 °C, BETOCRETE®-CL170-P may change colour. This will not have a negative influence on the product features.
- Concrete with BETOCRETE®-CL170-P must be produced, applied and post-treated in accordance with the currently valid standards.
- Lignite fly ash is only of limited suitability.
- The use of CEM III/B&C cements is prohibited.
- The crack expansion limitations must be complied with by the planner/engineer/structural engineer under any circumstances. Contrary designs must be verified after the corresponding verification and suitability!
- Before applying BETOCRETE®-CL170-P, even with other types of additives, preliminary tests must be carried out in accordance with the valid standards.
- In rare cases, BETOCRETE®-CL170-P can influence the solidification behaviour of the concrete. As a system-compatible product, RUXOLITH-T5 (VZ) is available for controlling the concrete.

GISCODE: BZM30

## Annotations

Conformity / Declaration / Verification

	
<b>SCHOMBURG GmbH &amp; Co. KG</b> Aquafinstraße 2-8 32760 Detmold, Germany 17 2 06443	
EN 934-2 <b>BETOCRETE-CL170-P</b> Concrete liquefier for concrete EN 934-2:12	
Chloride content	max. 0.10 M.-%
Alkali content	max. 10.5 M.-%
Corrosion behaviour	Only contains components per EN 934-1:2008, Annex A.1
Compressive strength	Satisfied
Water requirement reduction	Satisfied
Air content	Satisfied
Hazardous substances	NPD

NPD = "No Performance Determined"

The rights of the buyer with regard to the quality of our materials are based on our terms and conditions of sale and delivery. Our technical advice team will be happy to advise you in the case of requirements that exceed the scope of the application described here. In order to be binding, a legally binding written confirmation is required. The product description does not release the user from a duty of care. Lay a test area in the event of uncertainty. This version becomes invalid in the event of a new version being issued.