



Technical Data Sheet

BETOCRETE®-CL-210-WP

Art.-No. 2 06444

Crystalline waterproofing admixture with hydrophobic effects

CE	
SCHOMBURG GmbH & Co. KG Aquafinstraße 2 - 8 D-32760 Detmold 13 2 06444	
EN 934-2 BETOCRETE-CL-210-WP Waterproofing additive for concrete EN 934-2:T9	
Chloride content	max. 0.10 M.-%
Alkali content	max. 8.5 M.-%
Corrosion behaviour	contains components only from EN 934-1:2008, Annex A. 1
Compressive strength	fulfilled
Capillary water absorption	fulfilled
Air content	fulfilled
Dangerous substances	NPD

NPD = „No Performance Determined“

BETOCRETE-CL-210-WP is a liquid admixture for designing a water tight concrete with innovative 2 in 1 technology. Initially it functions chemically and reduces the water absorption in the matrix. 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
- Reduces capillary absorption
- 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

Areas of application:

BETOCRETE-CL-210-WP 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.

Technical data:

Colour:	white
Consistency:	liquid
Density (at +20 °C):	1.05 g/cm ³
pH-value	approx. 11.5
Application temp:	+5 °C to +30 °C
Storage:	frost free, 12 months in the original unopened container at + 20 °C. Use opened containers promptly.
Packaging:	1,040 kg container 220 kg drum 25 kg can
Water pollution class:	1 (Self classification)

Concrete requirements:

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

BETOCRETE®-CL-210-WP

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.

Dosage at concrete plants:

BETOCRETE-CL-210-WP can be added to the mix water or added to the finished concrete mix.

Dosage in concrete trucks:

Place all the BETOCRETE-CL-210-WP into the mixing drum and then mix well for 1 minute per m³ of drum contents but for a minimum of 5 minutes and use quickly.

Advice:

- Dependent on composition, concrete modified with BETOCRETE-CL-210-WP can feature crystals on the surface of the concrete.
- Carry out preliminary trials in accordance with current standards before using BETOCRETE-CL-210-WP 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-CL-210-WP must be produced, installed and cured following current valid standards.
- BETOCRETE-CL-210-WP does not contain materials which cause corrosion.
- In rare circumstances BETOCRETE-CL-210-WP 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!