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# **IÍ SCHOMBURG**



## **Technical Data Sheet**

# **BETOCRETE®-CL210-WP**

### Art.-No. 2 06444

### Crystalline waterproofing admixture with hydrophobic effects



### Areas of application:

BETOCRETE-CL210-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 <sup>3</sup>	
pH-value	approx. 11.	5
Application temp:	+5 °C to +40 °C	
Storage:	frost free, 12	2 months in the
<u> </u>	original uno	pened container
		Use opened
	containers p	
Packaging:	1,040 kg cc	1 /
0 0	220 kg dr	
	25 kg cc	
Water pollution class:	1 (Self class	
Concrete requirements:		
Minimum cement content:	CEM I	270 kg/m³
	CEM II	290 kg/m³
	CEM III /A	380 kg/m³
Pozzolanic cement with		
pozzolan content >20%	, b:	300 kg/m³
Granulated slag:		max.100 kg/m <sup>3</sup>
Fly ash:		max. 80 kg/m³

BETOCRETE-CL210-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

# BETOCRETE<sup>®</sup>-CL210-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-CL210-WP can be added to the mix water or added to the finished concrete mix.

#### Dosage in concrete trucks:

Place all the BETOCRETE-CL210-WP into the mixing drum and then mix well for 1 minute per m<sup>3</sup> of drum contents but for a minimum of 5 minutes and use quickly.

### Advice:

- A storage temperature of >30°C can lead to parts of BETOCRETE-CL210-WP settling. After thorough mixing, this has no influence on the product features.
- BETOCRETE-CL210-WP has to be thoroughly mixed after a longer storage period (>1 month).
- Carry out preliminary trials in accordance with current standards before using BETOCRETE-CL210-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-CL210-WP must be produced, installed and cured following current valid standards.
- BETOCRETE-CL210-WP does not contain materials which cause corrosion.
- In rare circumstances BETOCRETE-CL210-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!

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