

Triton Betocrete CL-210

Crystalline waterproofing admixture with hydrophobic effects

Description

Triton Betocrete CL-210 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 that is sustainable and permanently impermeable to water.

Areas of application:

Triton Betocrete CL-210 can be added to all concrete where water penetration should be permanently prevented. For example: cooling towers at power stations, tanks and containers, retaining basins, swimming pools, car parks, foundations, sandwich units, waterproof concrete, sewer channels/manhole access points, tunnels, concrete pipes and everywhere where water-tightness is needed.

Features:

- Liquid
- 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

Technical data:

Colour:	White	
Consistency:	Liquid	
Density (at +20°C):	1.05 g/cm ³	
pH-value approximately:	11.5	
Application temperature:	$+5^{\circ}C$ to $+40^{\circ}C$	
Storage:	Frost free, 12 months in the original unopened container at $+$ 20°C. Use opened container 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

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 should be identified 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:

Triton Betocrete CL-210 can be added to the mix water or added to the wet concrete mix.

Dosage in concrete trucks:

Place all the Triton Betocrete CL-210 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:

- A storage temperature of >30°C can lead to parts of Triton Betocrete CL-210 settling. After thorough mixing, this has no influence on the product features.
- **Triton Betocrete CL-210** has to be thoroughly mixed after a longer storage period (>2 months).
- Carry out preliminary trials in accordance with current standards before using Triton Betocrete CL-210 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 **Triton Betocrete CL-210** must be produced, installed and cured following current valid standards.
- Triton Betocrete CL-210 does not contain materials which cause corrosion.

Please also refer to current valid EU safety data sheet.

Triton Contact Details:

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