

TT-BETOCRETE CL-210

waterproofing concrete
admixture

TT-Betocrete CL-210 is a crystalline waterproofing concrete admixture with hydrophobic effects



TT-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.

TT-Betocrete CL-210 can be added to all concrete where water penetration should be permanently prevented. For example: basements, 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 system suited to on-demand volumetric concrete supply.
- 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 DATASHEET

TECHNICAL DATA

| | |
|-------------------------|--|
| Colour | White |
| Consistency | Liquid |
| Density (at +20°C) | 1.05 g/cm ³ |
| pH-value approximately | 11.5 |
| Application temperature | +5°C to +40°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

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

Dosage in concrete trucks

- Place all the **TT-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 **TT-Betocrete CL-210** settling. After thorough mixing, this has no influence on the product features.
- TT-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 **TT-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 **TT-Betocrete CL-210** must be produced, installed and cured following current valid standards.
- TT-Betocrete CL-210** does not contain materials which cause corrosion.

Please also refer to current valid EU safety data sheet.

Boran Court, Network 65 Business Park, Hapton,
Burnley Lancashire BB11 5TH
t: +44 (0)1282 473 100 e: info@wykamol.com
www.wykamol.com



Unit 3-5 Crayford Commercial Centre,
Greyhound Way, Kent, DA1 4HF
t: +44 (0)1322 318 830 e: info@tritonsystems.co.uk
www.tritonsystems.co.uk

The information in this technical datasheet is given in good faith and was correct at the time of publication, but does not purport to be all inclusive. We reserve the right to update this information at any time without prior notice. All data is obtained through extensive testing in stringent laboratory conditions, however as we have no control over site conditions or work executed we accept no liability for incidental and/or consequential property damage arising out of the use of this product. The Wykamol Group's standard terms and conditions of sale apply.