




Technical Data Sheet

BETOCRETE®-CP-360-WP

Art.-No. 2 06446

Crystalline waterproofing admixture with hydrophobic effects

	
SCHOMBURG GmbH & Co. KG Aquafinstraße 2 – 8 D-32760 Detmold 17 2 06446	
EN 934-2 BETOCRETE-CP-360-WP Waterproofing additive for concrete EN 934-2:19	
Chloride content	max. 0.10 M.-%
Alkali content	max. 21.0 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“



Areas of application:

BETOCRETE-CP-360 -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:	grey
Consistency:	Powder
Bulk density:	0.80 g/cm ³
Application temp.:	≥ +5 °C
Storage:	dry, 12 months in the original unopened container at +20 °C. Use opened containers promptly
Packaging:	17 kg bag
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

Outside of EN-norms:

OPC-cements:	≥270 kg/m ³
OPC with ≤ 35 %	
mixed in GGBS, fly ash or puzzolan:	≥290 kg/m ³
OPC with ≤ 65 %	
mixed in GGBS:	≥ 380 kg/m ³

BETOCRETE-CP360 -WP is powder-based 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.

- Powder based
- 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
- Reduction in Chloride migration
- Improvement of the resistance to freeze/thaw
- Minimization of maintenance and repair costs
- Time saving

BETOCRETE®-CP-360-WP

Product preparation:

Dosage:

The required dosage rate is 0.75–1.25% 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	0.75% based on CEM
	> 0.4–0.5	0.80% based on CEM
	> 0.5–0.55	0.90% based on CEM

Do not exceed the maximum dosage level of 1.25% based on CEM weight. For cement content with >400 kg/m³, a maximum dosage of 350 kg/m³ is sufficient.

Dosage at concrete plants:

BETOCRETE-CP-360-WP is to be dosed into the aggregate and mixed for a minimum of 30 seconds before adding the water and cement. Subsequently mix for a minimum of 45 seconds until ready for use.

Dosage in concrete trucks:

BETOCRETE-CP-360-WP is dosed directly into the mixing drum of the concrete truck on the building site. The mixing time should be 1 min/m³ of drum contents but be a minimum of 5 minutes.

Advice:

- Dependent on composition, concrete modified with BETOCRETE-CP-360-WP can feature crystals on the surface of the concrete.
- Carry out preliminary trials in accordance with current standards before using BETOCRETE-CP-360-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-CP-360-WP must be produced, installed and cured following current valid standards.
- In rare circumstances BETOCRETE-CP-360-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 safety data sheet!