

Hardening-accelerating admixture with antifreeze effect

AREA OF USE

Cementol Beta is a chemical admixture for concrete designed for concreting at low temperatures. It combines the effects of accelerating concrete hardening and antifreeze, allowing concrete to achieve the 5 MPa strength required before it is exposed to freezing more quickly.

It does not contain chlorides.

TECHNICAL CHARACTERISTICS

Characteristic	Declared value
Appearance	Colorless liquid
Density, 20 °C	[1.37 ± 0.03] kg/L
pH	5.8 ± 1.0
Water-soluble chloride content [Cl ⁻]	Chloride free
Alkali content [Na ₂ O equivalent]	< 8.0 %

COMPLIANCE

Cementol Beta - hardening accelerating admixture, complies with the requirements of EN 934-1 and EN 934-2 / T7 standards.

ACTION

It accelerates the hydration of cement minerals, which accelerates the development of early compressive strengths in concrete while lowering the freezing point of water in fresh concrete. The effect of the admixture is greater when using cement with higher hydration heat, in concretes with higher doses of cement and a lower water-cement ratio.

DOSAGE AND INSTRUCTIONS FOR USE

The recommended dose is 0.5 - 2.0% of cement weight (0.5 - 2.0 kg per 100 kg of cement) depending on the desired effects and working conditions.

It is dosed diluted with mixing water in order to prevent a local reaction and enables a better distribution throughout the concrete mixture.

When concreting in the winter, the recommendations for winter concreting must be followed. During casting, fresh concrete must have a temperature of at least +5 °C. Fresh concrete (free surfaces) must be immediately protected with a suitable insulating material to prevent heat transfer from the concrete to the surroundings during hydration.

If another TKK plasticizer or superplasticizer/hyperplasticizer is used concurrently with the accelerator of hardening, the water-cement ratio in the fresh concrete mixture is reduced.

Cementol Beta is compatible with many admixtures, such as: plasticizers from the Cementol Delta family, superplasticizers from the Cementol Zeta family, hyperplasticizers from the Cementol Hiperplast family, air-entraining admixtures from the Cementol Eta family.

Before using a higher number of admixtures in a concrete mixture, we advise prior examinations. In this case, they must be added to the concrete mixture separately [one after the other].

When designing a concrete mixture, we respect the requirements and principles of the EN 206 standard: Concrete - specification, performance, production and conformity, as well as the relevant national provisions.

During concreting and curing of fresh concrete we respect the principles of good practice.

PACKAGING

drums 60 kg, IBC containers 1 m³

STORAGE

- Protect the product from damage and direct sunlight.
- A properly stored product has a shelf life of at least 2 years after the date of manufacture.
- The product may still be used after the date of expiry, but the characteristics important for the intended use have to be examined.

HEALTH, SAFETY AND ECOLOGY

When working with Cementol Beta, wear protective gloves and eye protection. Follow the general instructions for working with chemicals: take care of cleanliness, do not eat, drink or smoke while working. After finishing work, wash hands thoroughly with water.

More information on safe handling and disposal of the product is available in the safety data sheet, which is provided on request, and is also available from the dealer or distributor where you purchased the product.

WARNING

Instructions and recommendations are given based on examinations in our laboratories and experience to date. Due to specific conditions and work methods, preliminary tests are advised for every type of use, for each individual case of use of the product alone, or in combination with other admixtures.

Since we cannot influence the course of work, we cannot be held responsible for its quality!



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