

Superplasticizer with the addition of silica fume

AREA OF USE

Cementol Antikorodin is a powdery superplasticizer with the addition of silica-fume. Because it significantly increases the resistance of concrete and mortar to the effects of various chemicals [against chemical corrosion], it is used in the production of concrete and mortar:

- In the fertiliser industry,
- In the chemical industry,
- In the food industry,
- In agriculture,
- For facilities by/in the sea,
- For structures in road construction.

Industrial chemicals [either in production, storage, or the atmosphere], salt water, and natural earth minerals can corrode and damage concrete in a relatively short period of time. Because it is often hidden beneath a protective covering or the corrosion products are continuously removed, this corrosion is frequently not noticed until it is dangerous.

Normal chemical-resistant concrete coatings [e.g., epoxy, asphalt, etc.] are effective as long as they remain intact. However, if the coating is damaged in any way [cracking, peeling], corrosion can begin at the point of damage and spread under the coating, going unnoticed.

With the addition of Cementol Antikorodin, concrete is protected throughout the mass. As a result, protective coatings are no longer required in many cases - there is no longer any risk of coating damage due to mechanical wear and loads [machinery, traffic, etc.].

TECHNICAL CHARACTERISTICS

Characteristic	Declared value
Appearance	Grey powder
SiO ₂ content	≤ 80 %
Water-soluble chloride content [Cl ⁻]	Chloride free
Alkali content [Na ₂ O]	< 0,4 %

COMPLIANCE

Cementol Antikorodin – superplasticizer, complies with the requirements of the standards EN 934-1 and EN 934-2 / T3.1 and T3.2.

ACTION

Cementol Antikorodin has two effects.

It significantly reduces the water-cement ratio in concrete while maintaining the same workability, increasing watertightness and reduces water penetration with dissolved aggressive substances into the concrete.

Because of its latent cement properties, the added silica-fume reacts with free lime in the cement, which is not leached and is therefore not available for reaction with salts, which would otherwise form harmful corrosive products. Fine particles of silica-fume in the cement paste also fill the empty spaces between the cement particles, making the cement paste significantly denser, which benefits many properties of concrete, including lower porosity, greater resistance to water penetration, greater abrasion resistance, and greater resistance to chemical attack.

DOSAGE AND INSTRUCTIONS FOR USE

The recommended dose is 5 - 10% of cement weight (5 - 10 kg per 100 kg of cement) depending on the desired effects and working conditions.

It is dosed into a dry aggregate and cement mixture and thoroughly mixed for at least 30 seconds before adding water. The mixing water is then added, and the mixture is mixed for another 90 seconds. According to the experience of some concrete plants, increasing the mixing time to 180 seconds is required to achieve homogeneity and consistent concrete quality.

Fresh concrete with the addition of Cementol Antikorodin is more sticky – cohesive and thixotropic. The possibility of "bleeding" is greatly reduced.

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

Cementol Antikorodin is **incompatible** with superplasticizers from the Cementol Hiperplast family.

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

When designing a concrete mix, we respect the requirements and principles of the EN 206 standard: Concrete – specification, performance, production and conformity, as well as the relevant national provisions. We strictly adhere to the recommendations for the limit values of the composition and properties of the concrete, taking into account the exposure levels, when designing concretes with increased corrosion resistance. Only clean, high-quality aggregate may be used. If possible, use a sulphate-resistant cement with a low C_3A content [less than 5 %].

During casting and curing of fresh concrete we respect the principles of good practice. Wet curing is required for at least 3 to 7 days if concreting at higher temperatures and/or low humidity [spraying with water, covering with felt and foil, etc.].

We follow the protective measures for working at low temperatures when concreting at low temperatures.

PACKAGING

paper bags 12 kg

STORAGE

- Store the product in a dry and well-ventilated place. Keep it away from potential damage, water and moisture.
- A properly stored product has a shelf life of min. 2 years after the production date.
- 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

No special measures are required when working with Cementol Antikorodin. 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!



TKK d. o. o. · Srpenica 1, 5224 Srpenica, Slovenija
+386 [0] 5 38 41 300 | info@tkk-group.com | www.tkk-group.com