

CE

Non-alkaline set-accelerating admixture for sprayed concrete

## **AREA OF USE**

Cementol Tiksokret P-BA is a powdered chemical admixture that greatly accelerates setting and cement hardening, making it suitable for the quick setting concrete or mortar preparation.

We use it mainly for dry-mix spraying:

- For repair works,
- For fortification of hills/slope and banks,
- To protect against the collapse of excavations.

It does not contain chlorides and therefore does not cause corrosion of the steel reinforcement.

Because it does not contain alkali metal ions, sprayed concretes prepared with Cementol Tiksokret P-BA have a longer lifespan, a minimal drop in concrete strength, and no risk of an alkali-aggregate reaction.

#### **TECHNICAL CHARACTERISTICS**

Characteristic	Declared value
Appearance	White powder
Water-soluble chloride content (Cl <sup>-</sup> )	Chloride free
Alkali content (Na₂O equivalent)	< 1.0 %

#### **COMPLIANCE**

**Cementol Tiksokret P-BA** - a non-alkaline set-accelerating admixture for sprayed concrete, complies with the requirements of the standards EN 934-1 and EN 934-5 / T2.

### **ACTION**

The addition of accelerator to cement immediately binds water and significantly thickens the cement paste. The hydration of cement minerals is greatly accelerated, resulting in cement and thus concrete being bound in a matter of minutes.

#### DOSAGE AND INSTRUCTIONS FOR USE

The recommended dose is 4 - 8 % of cement weight [4 - 8 kg per 100 kg of cement]. In some cases, the dosage may be lower, which needs to be proven with preliminary tests.

The amount of the admixture depends on a variety of factors, including the type, quantity, and age of the cement used, the water-cement ratio, the temperature of the concrete, the environment and substrate to which it is applied, and the surface inclination.

Because the water-cement ratio has a direct impact on the setting time, compressive strength, and durability of the concrete, it should be as low as possible (max. 0.50). Higher dosages are required for concrete with lower cement content, if we work at lower temperatures and for spraying on overhead surfaces.

The exact dosage of Cementol Tiksokret P-BA should be determined based on preliminary tests conducted in the expected weather conditions and with the materials and equipment that will be used on the construction site. The quality of sprayed concrete is also greatly influenced by the application technique.

In the dry-mix process, the set accelerating admixture for sprayed concrete is added to the dry mixture of cement and sand and mixed well – thus ensuring an even distribution through the entire mixture. Only water is added to the nozzle of the spraying machine.

In cases where wet sand is used for shotcrete, the set-accelerating admixture is added to the shotcrete machine immediately before the mixture is used. In this way, we prevent the concrete form setting to quickly and clogging the pipe.

When designing a base 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.

When performing shotcrete, we follow the requirements and principles of the standards EN 14487-1: Sprayed concrete – definitions, specifications and conformity and EN 14487-2: Sprayed concrete – Execution.

Cementol Tiksokret P-BA 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, set-retarding admixtures from the Cementol Retard family, and air-entraining admixtures from the Cementol Eta family.

Cementol Tiksokret P-BA is not used for ordinary concrete.

Do not mix Cementol Tiksokret P-BA with other set-accelerating admixtures for sprayed concrete.

#### **PACKAGING**

paper bags 25 kg, big-bag 500 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 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 Tiksokret P-BA, wear protective gloves, eye and face protection and protective work clothes. 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!

