

Set-retarding admixture

AREA OF USE

Cementol Retard S is used wherever we want to achieve slower setting or hardening of concrete. It is especially appropriate for making ready-mix concretes, and for concreting at high temperatures and/or in hot climates, to prevent excessively fast setting caused by high temperatures.

It is also appropriate for preventing so-called cold joints and for concreting in cases where fresh concrete needs to be revived.

It does not contain chlorides.

TECHNICAL CHARACTERISTICS

Characteristic	Declared value
Appearance	Dark brown or clear liquid
Density, 20 °C	(1.13 ± 0.02) kg/L
pH	6 ± 1
Water-soluble chloride content [Cl ⁻]	Chloride free
Alkali content [Na ₂ O equivalent]	<10.0 %

COMPLIANCE

Cementol Retard S - setting retarding admixture complies with the requirements of the standards EN 934-1 and EN 934-2 / T8.

ACTION

A concrete set retarder delays the formation of cement hydration products – development of crystal nuclei inside the cement paste. Thus prolonging the setting time of cement.

Table: Effect on cement mortar setting time according to EN 480-2

Cement mortar: EN 480-1

Cement: CEM I 42.5 R

Setting time [20 °C]	Reference mix	Test mix with the addition of Cementol Retard S, 0.3%	Retardation of setting time [min]
Initial [min]	310	520	210
Final [min]	355	570	215

DOSAGE AND INSTRUCTIONS FOR USE

The recommended dose is 0.2 - 1.0 % of cement weight (0.2 - 1.0 kg per 100 kg of cement) depending on the w/c ratio, temperature of the environment, required retarding time, cement dosage and its type and especially of its mineral compositions.

For accurate dosage, it is necessary to carry out preliminary examinations on the effect of retardation on cement setting with the materials that will actually be used under the same temperature conditions.

It is dosed diluted with mixing water in order to prevent a local reaction and enables a better distribution throughout the mixture. If it is dosed manually, dilute it with water in a volume ratio of not less than 1 : 5 [1 L set-retarder + 5 L water].

Cementol Retard S acts as a setting retarder and also as a plasticizer.

Cementol Retard S 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 mix, we advise prior examinations. In this case, they must be added to the concrete mix separately [one after the other].

Stir before use.

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.

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

ADVANTAGES OF USAGE

- Concreting at higher or high temperatures,
- Transporting concrete over long distances,
- Concrete with the addition of a retarder has better plasticity or workability and is therefore easier to install.

PACKAGING

drums 50 kg, IBC containers 1 m³

STORAGE

- The product should be stored at temperatures between +5 °C and +35 °C. We need to protect it from damage, freezing and direct sunlight.
- A properly stored product has a shelf life of at least 1 year 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

No special measures are required when working with Cementol Retard S. 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