

Admixture for concrete prepared with fine-grained aggregate contaminated with clay

## AREA OF USE

Cementol Edyx is an innovative liquid admixture intended for use in concrete when aggregates [crushed] with a high proportion of fine particles and clay impurities are used for the production of concrete. When working with such sands the dosage of hyperplasticizing admixture must be greatly increased due to the large specific surface area, to achieve appropriate initial workability. On the other hand the initial workability drops very quickly because of water absorption and swelling of clay impurities.

To achieve good workability and to retain the proper consistency of the fresh concrete mix Cementol Edyx should be used, and it should be always used in combination with a conventional PCE based hyperplasticizing admixture.

## TECHNICAL CHARACTERISTICS

Characteristic	Declared value
Appearance	Yellow to light brown liquid
Density, 20 °C	(1.10 ± 0.02) kg/L
pH	3.0 ± 1.0
Water-soluble chloride content [Cl <sup>-</sup> ]	Chloride free
Alkali content [Na <sub>2</sub> O equivalent]	< 3.0 %

## COMPLIANCE

**Cementol Edyx** - superplasticizer complies with the requirements of EN 934-1 and EN 934-2 / T3.1 and T3.2

## ACTION

Cementol Edyx has a higher affinity for fine particles with high specific surface area compared to conventional PCE based hyperplasticizing admixtures, so it preferentially adsorbs on the surface of clay impurities and blocks them. Thus the molecules of the water reducing admixture [hyperplasticizer] remain free, these can therefore allow the achievement of high initial workability and maintain good consistency.

## DOSAGE AND INSTRUCTIONS FOR USE

The recommended dose is 0.1 – 1.0 % of cement weight [0.1 – 1.0 kg per 100 kg of cement] depending on desired effect.

The usual dose is 0.2 – 0.3 % by weight of cement.

Cementol Edyx is always used in combination with PCE based hyperplasticizing admixture. Always first add Cementol Edyx to the fresh concrete mix and only then the hyperplasticizer which is otherwise used for the production of concrete.

Cementol Edyx must be added to a concrete mix in concentrated form to an already prepared fresh concrete mix of a lower consistency class, or after we have added 70-80% of the mixing water. Mix well to distribute the admixture evenly throughout the concrete mix and allow it to adsorb to the porous clay particles. Then add PCE based hyperplasticizing admixture and prepare fresh concrete mix according to usual procedure.

Cementol Edyx is compatible with a wide range of additives, including Cementol Delta family plasticizers, Cementol Hiperplast family hyperplasticizers, Cementol B NOVI hardening accelerator, Cementol Eta family air-entraining admixtures, and Cementol Retard family set retarders.

Cementol Edyx is incompatible with Cementol Zeta family superplasticizers, hardening accelerating admixture Cementol Omega F-conc., and air-entraining admixture Cementol SPA.

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].

Stir before use.

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.

## **ADVANTAGE OF USE**

- Excellent compatibility with crushed aggregates.
- Suitable for sands with different proportions of clay impurities.
- Improves the rheology and appearance of concrete.
- Good retention of workability of fresh concrete.

## **PACKAGING**

drums 50 kg, IBC containers 1 m<sup>3</sup>

## **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 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**

No special measures are required when working with Cementol Edyx. 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.

We recommend special attention and consultation with the technical service when using Cementol Edyx in self-compacting SCC concrete and/or in combination with air-entraining 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](mailto:info@tkk-group.com) | [www.tkk-group.com](http://www.tkk-group.com)