# TKK CEMENTOL WINTERMIX CONCRETE

Hardening accelerating admixture for concrete with antifreeze effect



#### **AREA OF USE**

Cementol Wintemix Concrete is a chemical concrete admixture designed for concreting at low temperatures. It combines the effect of a hardening accelerator and antifreeze, allowing concrete to reach the 5 MPa strength it needs to withstand the stresses generated by freezing more quickly.

It does not contain chlorides.

It is suitable for the production of all types of concrete.

#### **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.

## **TECHNICAL CHARACTERISTICS**

Characteristic	Declared value
Appearance	Light brown liquid
Density, 20 °C	$(1.13 \pm 0.03) \text{ kg/L}$
рН	7.5 ± 1.5
Water-soluble chloride content (Cl <sup>-</sup> )	Chloride free
Alkali content (Na <sub>2</sub> O equivalent)	< 8.0 %

# **COMPLIANCE**

**Cementol Wintermix Concrete** – hardening accelerating admixture, complies with the requirements of EN 934-1 and EN 934-2 / T7.

## **DOSAGE AND INSTRUCTIONS FOR USE**

The recommended dosage is 1-2% by weight of cement (0.25 - 0.50 kg per 1 bag of cement), depending on the desired effects and working conditions.

For the preparation of good quality concrete, in addition to sufficient cement, natural/crushed sand and aggregate of the appropriate grain size and composition, and drinking water are used.

The concrete admixture is dosed diluted with the mixing water. This prevents local reaction and allows it to be evenly distributed throughout the concrete mix.

When concreting in the winter, the recommendations for winter concreting must be followed:

- use a higher dosage of cement to prepare the concrete,
- use a cement with a higher heat of hydration (a higher "grade" of cement) to prepare the concrete.
- frozen sand/aggregate must not be used to prepare the concrete,
- use as little water as possible to prepare the concrete, use a superplasticizer to lower the w/c ratio (e.q. Cementol Waterfproof Concrete),
- fresh concrete must have a minimum temperature of +5 °C at the time of installation,
- concrete should not be installed on a frozen substrate.
- immediately protect freshly installed concrete [free surfaces] after installation with a suitable insulating material [e.q. felt, wood, construction foil] to prevent the transfer of heat generated during hydration from the concrete to the surrounding area.

The water/cement ratio in fresh concrete mix is reduced by using a plasticizer or superplasticizer at the same time as the hardening accelerator.

Cementol Wintermix Concrete is compatible with other admixtues such as: Cementol Waterproof Concrete, Cementol Frost Resistant Concrete, Cementol Concrete Contact.

If several admixtures are used in one concrete mix, they must be added separately (one after the other).

Mix before use.

#### **PACKAGING**

cans 5 kg and 10 kg

## 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 Wintermix Concrete, 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 tests 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