

Air-entraining admixture

AREA OF USE

Cementol Eta MPOR is an air-entraining admixture, and its performance enables the preparation of hardened concretes that are resistant to frost and thawing, as well as the action of precipitation, weathering, and corrosive solutions, particularly salts used for sprinkling roads in winter. As a result, it is used in the construction of all concrete structures as well as the manufacture of precast elements that will be subjected to the action of cold and/or de-icing salts, such as roads, bridges, dams, airport runways, canals, sidewalks, curbs, roof tiles, etc.

By using an air-entraining admixture we achieve:

- improved durability of concrete,
- increased resistance of hardened concrete to freezing and thawing,
- increased corrosion resistance of hardened concrete.

TECHNICAL CHARACTERISTICS

Characteristic	Declared value
Appearance	Yellow liquid
Density, 20 °C	(1.00 ± 0.02) kg/L
pH	9.3 ± 1.0
Water-soluble chloride content [Cl ⁻]	Chloride free
Alkali content [Na ₂ O equivalent]	< 3.0 %

COMPLIANCE

Cementol Eta MPOR - air-entraining admixture, complies with the requirements of the EN 934-1 and EN 934-2 / T5 standards.

ACTION

The purpose of the air-entraining admixture is to introduce stable micro air bubbles into fresh concrete. They should be distributed as evenly as possible throughout the concrete mass. The microbubbles in hardened concrete allow the release of internal stresses caused by the increase in volume when water freezes in the capillaries, while also interrupting the capillary system of pores, acting as a barrier that reduces the penetration of water and corrosive solutions from the concrete's surface into the interior. This improves the watertightness of the concrete.

When using an air-entraining admixture, the workability of the fresh concrete mixture is also slightly improved.

DOSAGE AND INSTRUCTIONS FOR USE

The recommended dose is 0.02 – 0.3% per weight of cement (0.02 – 0.3 kg per 100 kg of cement), depending on the amount of air to be introduced into the fresh concrete.

A higher dose may be used in some cases, particularly for aerated pumping concretes with a higher workability class and aerated self-compacting (SCC) concretes with a higher cement paste content. The number of air pores introduced is influenced by a number of factors; therefore, preliminary investigations with the materials which will be actually used are required to determine the optimal amount of admixture for each concrete mixture.

It is dosed diluted with mixing water to improve distribution throughout the concrete mixture.

Cementol Eta MPOR is compatible with many admixtures, such as: plasticizers from the Cementol Delta family, superplasticizers from the Cementol Zeta family, and hyperplasticizers from the Cementol Hiperplast family. It is also compatible with hardening accelerators Cementol B NOVI and Cementol Beta.

Cementol Eta MPOR is also compatible with admixtures SRA-type, such as Cementol Antikontrakt T, but preliminary investigations are essential when using this combination of admixtures.

If it is used in conjunction with other admixtures, they must be added separately to the concrete mix [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.

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 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 Eta MPOR. 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!

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