

COSTAMIX 300

Complete High-Performance Water Reducing Super Plasticizer



PRODUCT DESCRIPTION

COSTAMIX 300 is an exclusive blend of polycarboxylic ether polymers, representing a superplasticizer (PCE-based) that is specially crafted for high-performance concrete. Its primary objective is to enhance workability and durability while concurrently reducing permeability. By utilizing this advanced plasticizer, concrete can achieve enhanced workability, increased durability, and reduced permeability. Furthermore, this cutting-edge superplasticizer empowers improved initial and final strength in the concrete.

FEATURES

- Reduces long-term shrinkage and creep dimensions, while also minimizing the risk of segregation and bleeding.
- Enhances workability, air entrainment, and pumping properties of the concrete.
- Free from chlorides and suitable for pre-stressing applications.
- Increases both compressive and flexural strength of the concrete, both in its early and final stages.
- Protects reinforcement steel from harmful water-borne attack.
- Reduces the need for on-site adjustments to the slump and workability of the concrete.
- Enables meeting specified strength grades with reduced cement content and increased workability.
- Chloride-free, making it safe for use in pre-stressed and reinforced concrete.

USES

- Costamix300 is employed in all concrete works that necessitate excellent workability.
- Costamix300 is utilized in the production of high-performance precast and pre-stressed concrete, allowing for a substantial reduction in water content.

- It is used to achieve high strength, while also improving workability and reducing the water-to-cement ratio.
- It enhances the effectiveness of the water content in a concrete mix.
- Can be utilized for use in reducing, effectively, the concrete permeability, thereby minimizing water penetration.

DOSAGE

The ideal dosage must be determined through trials using the exact materials and conditions that the concrete will encounter in its intended application, ensuring it meets specific requirements.

For costamix 300, the typical dosage falls within the range of 1.2% to 2% of the cementitious content.

EFFECT OF OVERDOSAGE

Exceeding the recommended dosage of the admixture may lead to increased workability, a slight rise in air entrainment, and delayed setting time.

Despite this, the ultimate strength of the concrete will not be negatively impacted and will typically be higher than that of normal concrete if properly placed and appropriately cured.

DISPENSING

The measured quantity of Costamix 300 should be added along with the gauging water. For best results, add Costamix 300 in the last phase after pre-wetting the mix with 80% of the total water required.

SPILLAGES

- Spillages of product should be absorbed onto sand, earth or vermiculite and transferred to suitable containers.
- Remnants should be hosed down with large quantities of water.

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TECHNICAL PROPERTIES

Packaging	20L, 210L, 1000L
Appearance	Transparent Liquid
Shelf life	12 months minimum from production date
Density	1.03 + 0.02kg/liter + 0.01
PH	7.0±1
Water reduction	> 30 - 40% compared with Reference mix
Corrosion behavior	Component were selected according to EN934 -1: Annex A.1
Retention of consistence	At 30 mins > Reference mix at initial
Recommended dosage	1.2 – 2.0% by weight of cement, depending on the requested performance of the concrete. Usual dosage: by weight of cement. It is advisable to carry out trial mixes to establish the exact dosage rate required
Chloride content	Nil as per BS 5075
Air entrainment	Less than 2% as per ISO 9103

SAFETY PRECAUTIONS

- Keep away from contact with eyes and skin.
- In case of skin contact, thoroughly wash the affected area.
- While working, always wear protective gloves and eye protection.
- If the product comes into contact with your eyes, open your eyes wide, rinse with warm water, and seek immediate medical attention.

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SHELF LIFE

Shelf life is 12 months provided the temperature is kept within the range of 5°C to 50°C.

STANDARD COMPLIANCE

Conforms to the requirement of ASTM C 494 Type G, ASTM C1017

HEALTH & SAFETY

- Please ensure that hand gloves and goggles are worn during installation
- Apply in ventilated areas, away from flames
- It is only important that during application and after application, standard safety procedures are done.
- Please consult current MSDS for product.
- *For Professional Use only.*

ADDITIONAL INFORMATION

Costarchem manufactures a complete range of construction chemical products which include:

- Concrete admixtures
- Waterproofing system
- Flooring system
- Cementitious and epoxy precision grouts
- Damp-proofing products
- Sealants and adhesives
- Repair and refurbishment systems

For more information on any of our products, please contact Costarchem global or regional office.

LEGAL NOTE

The information and recommendations relating to the application of Costarchem products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with the stated recommendations in the product datasheets. Whilst Costarchem endeavors to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it. The user of the product must test the product's suitability for the intended application and purpose. Costarchem reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.