

COSTAR RETARDER 150

PCE Based Retarding Admixture



PRODUCT DESCRIPTION

Costar Retarder 150 (PCE Based) is a high-performance admixture designed to extend the setting time of cementitious materials, offering unmatched control over hydration in challenging conditions (Hot and Cold Weather conditions). Engineered with advanced polycarboxylate ether technology, this retarder ensures superior workability, enhanced durability, and optimal performance in construction applications.

FEATURES

- Precisely regulates the hydration process, enabling extended workability in hot climates or complex projects.
- Enhances workability, air entrainment, and pumping properties of the concrete.
- Works seamlessly with a wide range of cement types and supplementary cementitious materials.
- Protects reinforcement steel from harmful water-borne attack.
- Reduces shrinkage and cracking, ensuring the long-term strength of structures.
- Contains low VOCs and is free of harmful chemicals, making it environmentally responsible.
- Chloride-free, making it safe for use in pre-stressed and reinforced concrete.

USES

- Costar Retarder 150 is Ideal for projects requiring long transportation times or intricate placement methods.
- Costar Retarder 150 is utilized in the production of high-performance concrete with extended setting requirements.

- It is used to control the hydration in Hot Weathering conditions.
- 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 Costar Retarder 150, the typical dosage falls within the range of 0.8% to 1.5% 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 Costar Retarder 150 should be added along with the gauging water. For best results, add Costar Retarder 150 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
Corrosion behavior	Component were selected according to EN934 -1: Annex A.1
Retention of consistence	At 45 mins > Reference mix at initial
Recommended dosage	0.8 – 1.5% 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 B 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.