

COSTARMIX 200 CAST

High Early Age Strength, Low Viscosity High Performance water reducing Super Plasticizer for Precast Concrete Industry.



PRODUCT DESCRIPTION

Costarmix 200 Cast is a super plasticizer based on SNF (Sulfonated Naphthalene Formaldehyde) that has been specially formulated for the precast concrete industry. It combines highly effective high-range water reducing properties with exceptional dispersion levels, ensuring strong and reliable performance. This product is particularly well-suited for precast concrete applications, where the primary goal is to optimize the concrete's performance in both its plastic and hardened states.

ADVANTAGES

- Offers high early age strength development, enhancing productivity by enabling earlier transfer of pre-stress and eliminating the need for accelerating admixtures in cold weather.
- Free from chlorides, making it ideal for use in concrete containing embedded steel.
- Allows water reductions of up to 45%, leading to increased early age strength and superior ultimate strength.
- The enhanced final strength permits earlier removal of formwork, quicker lifting of precast elements, and further reductions in cement usage. This boosts efficiency and reduces overall energy consumption.
- Improves the rheology of concrete, resulting in a smooth surface finish with fewer blemishes, reducing the need for remedial work (dressing).
- Compatible with all types of cement.
- Produces concrete with excellent durability, low permeability, and enhanced resistance to sulphate attack.

USES

- Ideal for producing Self Compacting Concrete (SCC), good workable flowing concrete and high workability concrete.
- To produce workable concrete at very low water to cement ratios providing ease of mold filling and less workmanship where access or dense reinforcement can be a challenge.
- Used in concrete production where high early and final strength is required.
- Contributes to the creation of high-strength and low-permeability concrete.
- Ideal for use in complex and heavily reinforced concrete areas.
- Suitable for high-performance concrete in applications like columns, beams, decks, and dams.
- Enhanced quality and plasticity of concrete mixes.
- Ability to produce pumpable ready-mix concrete.
- Suitable for rheoplastic concrete, allowing easy formation of densely reinforced concrete elements.
- Enables the production of high-grade concrete with high-range water reduction and excellent workability.

DOSAGE

- Optimum dosage should always be determined by trials using the materials and conditions that will be exposed in use to meet specific requirements.
- The typical dosage range for Costarmix 200 Cast is 1 - 2.0 % by weight of cement.

OVERDOSING

An overdose of above the recommended level of admixture may promote segregation and excessive bleeding of the concrete mix. The ultimate strength of the concrete will not be adversely affected and will generally be higher than for normal concrete if properly placed and cured.

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TECHNICAL PROPERTIES

Packaging	20L, 210L, 1000L
Appearance	DarkBrown Liquid
Shelf life	12 months minimum from production Date
Specific Gravity	1.05 + 1.07
PH	7.0 ± 1
Recommended dosage	Recommended dosage 1.0 – 2.0 % by weight of cement. It advisable to carry out trial mixes to establish the exact dosage required
Chloride content	Nil as per BS 5075
Air entrainment	Less than 2% as per ISO 9103
Water reduction	> 12% compared with Reference mix
Corrosion behavior	Component were selected according to EN934-1: Annex A.1

DISPENSING

The measured quantity of Costarmix 200 Cast should be added along with the gauging water. For best results, add Costarmix 200 Cast 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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SHELF LIFE

Shelf life in unopened original containers is 12 months when stored at 70°F (21°C).

STANDARD COMPLIANCE

Conforms to the requirement of ASTM C494 type C & F

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.