

COSTARMIX 600

Fourth Generation (PCE) High Performance
Concrete Pumping Superplasticizer



PRODUCT DESCRIPTION

COSTARMIX 600 is an innovative 4th generation superplasticizer, featuring a distinctive blend of polycarboxylic ether-based polymers. It is specifically designed to serve as a slump-retaining and water-reducing admixture, tailored for high-performance concrete. 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

- Minimizes the need for on-site adjustments to the slump and workability of the concrete.
- Decreases long-term shrinkage and creep, while also reducing the risks of segregation and bleeding.
- Enhances workability and pumping characteristics of the concrete.
- Suitable for pre-stressing applications.
- Increases both early and final compressive and flexural strength of the concrete.
- Protects reinforcement steel from harmful water-related deterioration.
- Reduces or eliminates the high energy demands of external heat for accelerated curing.
- Provides excellent slump retention in hot climates.
- Enables approximately 20 - 40% water reduction compared with Reference mix and based on mix design adopted.

USES

- Costarmix 600 is used in the production of high performance precast and pre-stressed concrete by reducing significant amount of water.
- Used to achieve high strength with improved workability and reduced w/c ratio.

- Long distance transport of concrete.
- Costarmix 600 is used in all concrete works where good workability and increased waterproofing properties are required such as sea walls, swimming pools, tunnels, bridges etc.
- Used in production of concrete with extremely workable characteristics referred to as high slump.
- Hot weather concreting.

DOSAGE

Typical dosage for Costarmix 600 is within the range 0.8 – 1.5% by weight of cement.

EFFECT OF OVERDOSAGE

A dosage above the recommended level of admixture may result in high workability, slight increase in air entrainment and retardation of setting time. 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.

DISPENSING

The measured quantity of Costarmix 600 should be added along with the gauging water. For best results, add Costarmix 600 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	1.06 + 0.02kg/litre
PH	7.01 ± 1
Water reduction	> 20 - 40% compared with Reference mix
Corrosion behavior	Component were selected according to EN934 -1: Annex A.1
Compressive Strength	Fulfilled
Increase of Consistency	Increase > 90mm from initial slump OR Increase > 130mm from initial flow
Retention of consistence	At 30 mins > Reference mix at initial
Recommended dosage	0.8 – 1.5% by weight of cement, depending on the requested performance of the concrete. It is advisable to carry out trial mixes to establish the exact dosage rate required
Chloride content	Nil as per BS 5075
Fire Resistance	Non- flammable under normal temperature and pressure.
Air entrainment	Less than 2% as per ISO 9103

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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.