

COSTARMIX CR

Non-Chloride Anti-Corrosion Admixture



PRODUCT DESCRIPTION

CostarMix CR presents an effective remedy for preserving concrete integrity against chloride-induced corrosion, thus prolonging the durability of reinforced concrete structures. Within the alkaline milieu of concrete, an intrinsic ferric oxide shield naturally forms on embedded reinforcing steel, guarding it against corrosion. By reintroducing the protective layer on the steel surface, the CostarMix CR admixture significantly retards the corrosion process in reinforcement. The incorporation of nitrite ions within CostarMix CR admixture serves a pivotal function in forestalling the creation of ferrous chloride complexes. These nitrite ions proactively interact with defective ferrous oxide ions, preempting chloride-triggered corrosion and stabilizing the passive layer, thereby curtailing the risk of corrosion.

- Used in casting High flow concrete and controlled expansion.
- Can be incorporated with concrete repair.
- Used to improve concrete reinforcement resistivity.

APPLICATION MODE

- To achieve the best and consistent performance, it is recommended to dispense the admixture on damp, fine aggregate or together with the initial batch water.
- COSTARMIX CR admixture can be introduced into the concrete mixture using a dispenser specifically designed. Alternatively, it can be added manually using a suitable measuring device that ensures accuracy.

BENEFITS

- Reduced permeability
- Reduced segregation and bleeding
- Improves workability and higher resistance to damage from cyclic freezing and thawing
- Contribute to Increase general compressive strength in concrete mix.
- Substantially increased durability.
- Prolonged lifespan of reinforced concrete structures
- Accelerated setting, particularly advantageous in cold weather scenarios
- Improved plasticity and Improved air-void system in hardened concrete

DISPENSING

The measured quantity of Costarmix CR should be added along with the gauging water. For best results, add Costarmix CR 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.

DOSAGE

Recommended dosage: 1 - 2.0 % by weight of cement. It is advisable to carry out trial mixes to establish the exact dosage rate required

USES

COSTARMIX CR is typically used to produce:

- High-quality Corrosion inhibiting concrete.

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TECHNICAL PROPERTIES

| | |
|---------------------------|---|
| Packaging | 20L, 210L, 1000L |
| Appearance | Yellow Liquid |
| Shelf life | 12 months minimum from production date |
| Density | 1.19 + 0.02kg/litre@25°C |
| PH | 7.0 ± 1 |
| Recommended dosage | Recommended dosage: 1 - 2.0 % 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 |
| Corrosion behavior | Component were selected according to EN934-1: Annex A.1 |

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.

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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 requirements of ASTM C494 type S

HANDLING & STORAGE

Precautions for safe handling

- Prevent aerosol formation.
- Avoid inhalation of mists/vapors while applying product.
- Avoid skin contact.

Conditions for safe storage and disposal

- Keep only in the original container in a cool, dry, ventilated place away from fire, heat, or flame.
- Protect product from direct ultra-violet or sun light.
- Dispose of contents/container to hazardous or special waste collection point.

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.