

# COSTARCEL 100

Chloride Based Accelerating Admixture for Concrete and Mortar



## PRODUCT DESCRIPTION

COSTARCEL 100 is a chloride-based concrete set accelerator, supplied as a ready-to-use liquid admixture. It significantly accelerates the initial setting time of mortar and concrete, making it up to three times faster than normal, without causing any adverse effects on other concrete and mortar properties.

By incorporating COSTARCEL 100, workability and strength of the mixture are improved while promoting faster cement hydration. This results in easier placement of the mix and speeds up construction by reducing the initial set and curing time, all without causing any slump loss. The use of this admixture allows for earlier removal of formwork and other protective measures and enables an earlier start to finishing, saving both time and labor.

In applications requiring very high early strengths under normal and hot weather conditions, COSTARCEL 100 performs exceptionally well. It is specifically designed for situations where early stiffening (slump loss) is not desirable, yet high early strengths must be achieved within a specified time frame.

## FEATURES

- Chloride free, safe in pre-stressed and reinforced concrete.
- Allows continued placing of concrete at low temperatures
- Gives additional frost protection by reducing the low water content and accelerating hydration of cement
- Reduces segregation and increases density and compressive strength
- Can be used for concrete repair especially areas requiring SCC repair compounds
- High Flow and Fluidity and controlled expansion
- Allows for early stripping and re use of forms

- No effect on slump

## USES

- Concrete requiring fast stripping times
- Self-compacting concrete
- Pile cap re-profiling
- As a substitute for rapid hardening cement
- Pre-cast elements
- Can also be used in cold climates where accelerated strength development is necessary

## DOSAGE

Optimum dosage should always be determined by trials using the materials and conditions that will be exposed in use to meet specific requirements.

Typical dosage for costarcel 100 is within the range of 1% - 2% of cementitious material.

## 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.

## 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.

## Curing

As with all structural concrete, good curing practice should be maintained. Water spray, wet hessian or a Concrete spray applied curing membrane should be used.

# COSTARCEL 100

Chloride Based Accelerating Admixture for Concrete and Mortar



## TECHNICAL PROPERTIES

<b>Packaging</b>	20L, 210L, 1000L
<b>Appearance</b>	Dark Brown Liquid
<b>Shelf life</b>	12 months minimum from production date
<b>Density</b>	1.14 + 0.02kg / litre
<b>PH</b>	7.0 ± 1
<b>Recommended dosage</b>	Recommended dosage: 1 - 2.0 % by weight of cement. It is advisable to carry out trial mixes to establish the exact dosage rate required
<b>Chloride content</b>	Nil as per BS 5075
<b>Air entrainment</b>	Less than 2% as per ISO 9103
<b>Corrosion behavior</b>	Component were selected according to EN934-1: Annex A.1

### Compatibility

COSTARCEL 100 is compatible with other Costar admixtures in the same concrete mix. In a case where multiple admixtures is to be used, each should be mixed independent of the other. The

performance of concrete containing more than one admixture should be assessed by trial mixes to ensure the desired combination of effects is obtained. COSTARCEL 100 is suitable for use with ordinary Portland cements.



# COSTARCEL 100

Chloride Based Accelerating Admixture for Concrete and Mortar



## SHELF LIFE

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

## STANDARD COMPLIANCE

Conforms to the requirements of ASTM C494 type C & S.

## 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.

