

TECHNICAL DATA SHEET Cement Conditioning Admixture CCA

Overview

Fully hydrated cement is one of the most critical attributes in consistently producing the highest quality finished concrete. EverTek Cement Conditioning Admixture CCA notably increases high early strength and late strength of any mix design when compared to untreated reference concrete. Strength enhancing technology creates denser, stronger cement significantly more resistant to acids, chlorides, and other harsh chemicals. With the addition of proprietary cement conditioners EverTek CCA takes acid and chemical resistance to another level.

EverTek CCA is an innovative, patent-pending, admixture that boosts concrete strength at both early and late ages. This breakthrough technology supports more sustainable construction practices by enabling reduced cement content in concrete mixtures without sacrificing compressive strength.

The unique chemistry of EverTek CCA facilitates improved cement hydration, which is the key to its strength-enhancing effects. By optimizing this critical process, EverTek CCA delivers superior strength development compared to reference concrete.

EverTek CCA meets the ASTM C 494/C 494M requirements for Type S, Specific Performance, admixtures. Its ability to maintain compressive strength with lower cement content translates directly to reduced CO2 emissions from cement production. This makes EverTek CCA an important tool for concrete producers and construction companies looking to lower their carbon footprint.

Features:

- Improves cement hydration
- Increases strength development both early (1-day) and late-age (28-day)
- Enhances workability of high-performance concrete mixtures
- Significantly increases resilience to chemical attack

A high-performance, sustainable admixture that enhances concrete strength while enabling lower cement usage. Its unique chemistry and proven performance make it an attractive option for concrete producers seeking to improve their environmental impact.

Product Advantages:

- Enhances and accelerates cement hydration
- Increases early and late-stage strength
 compared to untreated reference concrete
- Meets the ASTM C 494/C 494M requirements for Type S, Specific Performance admixtures
- Increases workability
- Increases compressive and flexural strengths
- Reduces brittleness, increases concrete density
- Significantly increases the resilience of concrete in harsh chemical environments
- Is a non-corrosive admixture
- Is a liquid
- Enables earlier stripping of formwork
- Does not alter traditional finishing or placement procedures
- Is compatible with other admixtures
- Allows for economical adoption
- Provides a "nicer" finish

Product Uses:

Recommended for use in:

- Ready-mixed concrete
- Prestressed concrete
- Precast concrete
- Self-consolidating concrete (SCC)
- Geotechnical grouting and ground improvement
- Flatwork
- Roller Compacted Concrete (RCC)
- Block and brick manufacturing
- Spillways and raceways
- Containment sites
- Shotcrete
- Architectural concrete

Industries served:

Mining | Farming | Infrastructure |Oil & Gas Manufacturing & Processing | Retainment Chemically Intense Environments |Waste Facilities

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Application Instructions

Dosing

- Base dosage on the cement content in the mix design.
- Although there is a range of 350mL to 500mL of CCA per 100Kg of cement, standard dosing is 400 mL per 100 Kg of cement for highly acid and chemical resistant concrete.
- The range of dosage is implied to allow for cement reduction and slag increase, the associated results found when reduced cement and higher dosages are tested is dependent upon testing by the individual user.
- Although incredible results have been found reducing cement content by up to 15% and increasing slag content there are many variables to consider geographically. Aggregate, type of cement, WC are several that should be considered.
- Water Content (WC) should fall between 0.485 0.51 WC unless using Roller Compacted Concrete or UHS mix designs.
- It is always recommended to perform a suitability sample for the environment the concrete will be placed.
- Reduction in cement content should not be performed without adequate testing prior to proceeding with project.

Mixing

- CCA can be added at the plant or onsite.
- When adding onsite ensure thorough disbursement throughout concrete matrix. Depending on age and condition of drum/truck provider is using EverTek suggests a minimum of 100 drum revolutions prior to dispensing.
- For metered trucks, introduce via the standard truck mounted admixture dispenser.
- Always add EverTek CCA first before any other admixes are introduced.

Curing Concrete

- EverTek CCA is NOT a replacement for curing concrete!
- All concrete should be cured properly to ensure proper surface hydration and prevention of crazing, unnecessary shrinkage, and aid in proper hydration.
- It is always recommended to use EverTek PRO Tek Concrete as a cure and fortifier on new slab placement. Expected rate of coverage when using PRO Tek Concrete on slabs conditioned with EverTek CCA is 420 – 500 square feet per gallon.

Clean Up

Wash all tools and equipment with water.

Disposal

Dispose of excess product and packaging in accordance with local governing laws.

Technical Data

Corrosivity:

EverTek CCA is a non-chloride, non-corrosive admixture that will not initiate or promote corrosion of embedded steel reinforcement, prestressing steel, or galvanized steel floor and roof systems. The manufacturing process does not utilize calcium chloride or other chloride-based ingredients. This noncorrosive formulation ensures the long-term durability and structural integrity of concrete structures.

- 350-500 ml per 100kg of cement
- Add before any other admixes are introduced
- WC 0.485

Compatibility:

EverTek CCA is compatible with most common concrete admixtures used to produce high-quality concrete. This includes:

- Normal, mid-range and high-range water reducers
- Air-entraining agents
- Accelerators and retarders
- Extended set control admixtures
- Corrosion inhibitors
- Shrinkage reducers

Appearance

EverTek CCA has a slight darkening or "graying" of the finished concrete. In architectural precast or exposed concrete applications where colour consistency is critical, it is strongly recommended to conduct a mock-up in accordance with industry guidelines.

Packaging

- 1 gallon
- 5 gallon
- 55-gallon drum
- 275-gallon tote
- Bulk

Product Codes:	
CCA-1	1 gallon
CCA-5	5 gallon
CCA-55	55-gallon drum
CCA-275	275-gallon tote
Call for bulk inquiries.	

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