

Super Cast 500EB

High early strength polymer-based superplasticiser for precast concrete

Product Description

Super Cast 500EB is a polymer-based high range water-reducing admixture that is specially designed for producing superior high early strength concrete in precast applications.

Super Cast 500EB contains no added chloride. It is formulated to comply with specifications for chemical admixtures for concrete: ASTM C 494 and Type F; BS 5075: Part 3: 1985.

One litre weighs approximately 1.04kg ± 0.02kg.

Dispersion

Super Cast 500EB is a superior dispersing admixture, having a marked capacity to disperse cement agglomerates normally found in a cement-water suspension. The capability of Super Cast 500EB exceeds that of normal water-reducing admixtures (Type WR) and High Range Water Reducers (Type HWR), resulting in lower dosages and better performance.

Product Advantages

- Superior early strength enhancement
- High workability
- Superior surface finish
- Superior water reduction
- Optimise precast concrete production

Uses

Super Cast 500EB produces concrete with high early strength for precast concrete elements, while at the same time achieving high workability for easy and fast placement of concrete. It also allows concrete to be produced with very low water-cement ratios in low to high slump ranges.

Addition Rates

Addition rates of Super Cast 500EB can vary with type of applications, but will normally range from 400 to 2,000mL / 100kg of cementitious material. In most instances, the addition of 600 to 1,600mL / 100kg of cementitious material will be sufficient. Should conditions require using more than recommended addition rates, please consult your local GCP representative.

Compatibility

Super Cast 500EB is compatible with most water-reducing admixtures as well as specialty admixtures like accelerators, DCI®Corrosion Inhibitor, ECLIPSE®Shrinkage-Reducing Admixture and V-MAR®Rheology-Modifying Admixture. Super Cast 500EB should not be used together with Naphthalene-based superplasticiser. Trial mixes need to be carried out to determine the compatibility between Super Cast 500EB and other admixtures before use. All admixtures should be separately added to the concrete. Pre-testing of the concrete should be performed to optimise dosages and addition sequence of these admixtures.

Packaging

Super Cast 500EB is available in 205L pails and in bulk.

Super Cast 500EB contains no flammable ingredients. It will begin to freeze at approximately 0°C, but will return to full strength after thawing and thorough agitation.

In storage, and for proper dispensing, Super Cast 500EB should be maintained at temperatures above 0°C.



Advantages

Superior Early Strength Enhancement

Super Cast 500EB accelerates cement hydration at a very early stage. Together with the very efficient dispersion effect, Super Cast 500EB achieves very high early strength for the production of precast structural elements.

High Workability Super

Cast 500EB is ideal for precast applications, where high early strength is desired, and where high workability will aid faster placement and improved mix consolidation.

Superior Surface Finish

Super Cast 500EB produces concrete with superior surface finish, without stickiness, tearing or spotty set characteristics.

Superior Water Reduction

With up to 40% water reduction possible, Super Cast 500EB is highly effective in low water-cement concrete, producing high strength and high early strength concrete.

Optimise Precast Concrete Production

The accelerated set times of Super Cast 500EB may reduce or eliminate the need for heat curing to achieve high early strength concrete. The earlier removal of forms leads to reduced cycle times, faster mould turnaround, reduced total costs and increased productivity.

Dispensing Equipment

Please contact your local GCP representative for further information regarding the dispensing equipment for this product.

Health and Safety

Please refer to Super Cast 500EB Material Safety Data Sheet or consult GCP Applied Technologies.

gcpat.in | India customer service: +91 124 4885900

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

DCI, Eclipse and V-MAR are trademarks, which may be registered in the United States and/or other countries, of GCP Applied Technologies, Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2016 GCP Applied Technologies, Inc. All rights reserved.

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Alpharetta, GA 30009, USA

GCP Applied Technologies India Private Limited, Unit No. 208, Second Floor, Time Tower Building, Sector-28, MG Road, Gurugram, Haryana-122002, India

This document is only current as of the last updated date stated below and is valid only for use in India. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on www.gcpat.in. Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2025-05-15

gcpat.in/solutions/products/super-cast-500eb