

DARACEM[®] 65

Mid-range water-reducing admixture ASTM C494 Type A

Product Description

DARACEM[®]65 is a water reducer specifically formulated to produce concretes with dramatically enhanced finishing characteristics and normal setting times. Effective through a wide addition rate range, DARACEM[®]65 combines the benefits of normal and high-range water reducers allowing for the ultimate control of the concretes placing and finishing properties.

DARACEM[®]65 is an aqueous solution of complex organic compounds, each of which contributes uniquely to the concrete's final properties. It is manufactured under rigid controls which provide uniform, predictable performance. DARACEM[®]65 contains no calcium chloride. Supplied as a dark brown, low viscosity liquid, one gallon weighs approximately 9.5 lbs (1.14 kg/L).

Uses

DARACEM[®]65 produces a concrete with lower water content, improved placement properties and enhanced finishability. It yields a less permeable and more durable concrete. DARACEM[®]65 is used in ready-mix, job site and concrete paving plants for normal and lightweight concrete, in block and precast. It imparts a "slickness" to the surface of the concrete making it most appropriate for concrete flatwork as well as slip form work. DARACEM[®]65 is also particularly effective in lean or fly ash and slag compensated mixes.

Product Advantages

DARACEM[®]65 offers significant advantages over conventional water reducers. Laboratory and field work has consistently demonstrated:

Ultimate Workability and Finishability

The exceptional water-reducing capabilities allow for concrete production at higher slumps with better water retention and internal cohesiveness, providing a less "sticky" concrete with improved placement properties. Formulated with proven finishing enhancing components, DARACEM[®]65 controls bleeding while bringing the mortar to the surface. Finishers have stated that the concrete has improved trowelability. The influence of DARACEM[®]65 on the finishability of lean mixes has been particularly noticeable. Floating and troweling, by machine or by hand, easily imparts a smooth, close tolerance surface with less machine time and labor.

Compatibility with Other Admixtures and Batch Sequencing

DARACEM®65 is compatible with most GCP admixtures as long as they are added separately to the concrete mix. In general, it is recommended that DARACEM®65 be added to the concrete mix near the beginning of the batch sequence but after the cement and water are combined for optimum performance. Different sequencing may be used if local testing shows better performance. Please see GCP Technical Bulletin TB-0110, *Admixture Dispenser Discharge Line Location and Sequencing for Concrete Batching Operations* for further recommendations.

Pretesting of the concrete mix should be performed before use, as conditions and materials change in order to ensure compatibility, and to optimize dosage rates, addition times in the batch sequencing and concrete performance. For concrete that requires air entrainment, the use of an ASTM C260 air-entraining agent (such as DARAVAIR® or DAREX® product lines) is recommended to provide suitable air void parameters for freeze-thaw resistance.

Packaging & Handling

DARACEM®65 is available in bulk, delivered in metered tank trucks, totes and drums.

DARACEM®65 will freeze at approximately 25 °F (-4 °C) but will return to full strength after thawing and thorough mechanical agitation.

Neutral Setting Times

Formulated with a set control agent, DARACEM®65 provides normal setting characteristics throughout its addition rate range. This allows for increased water reduction and increased slump without significantly extended setting times. It also allows the flexibility to vary addition based on specific job and weather requirements.

Superior Strength Performance

The water reduction properties, up to 12%, and dispersion characteristics allow the production of lower water to cement ratio concretes and more complete hydration. The combined effect is increased compressive and flexural strengths at all ages.

Product Advantages

- Ultimate workability and finishability
- Neutral setting times
- Superior strength performance

Addition Rates

The addition rate range of DARACEM®65 is 3 to 9 fl oz/100 lbs (190 to 590 mL/100 kg) of cement. Optimum addition depends on the other concrete mixture components, job conditions and desired performance characteristics.

Dispensing Equipment

A complete line of accurate, automatic dispensing equipment is available. DARACEM®65 may be added to the concrete mix on the sand or in the batch water.

Specifications

Concrete shall be designed in accordance with *Standard Recommended Practice for Selecting Proportions for Concrete*, ACI 211.

The water-reducing admixture shall be a mid-range water-reducing admixture such as DARACEM®65 as manufactured by GCP Applied Technologies, or its equivalent. The admixture shall not contain calcium chloride. It shall meet the requirements of *Specification for Chemical Admixtures for Concrete* ASTM Designation C494 as a Type A admixture. Certification of compliance shall be made available on request. The admixture shall be considered part of the total mixing water.

The admixture shall be delivered as a ready-to-use liquid product and shall require no mixing at the batching plant or job site.

ca.gcpat.com | North America customer service: 1-877-4AD-MIX (1-877-423-6491)

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.

Daracem, Daravair and Darex 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 2018 GCP Applied Technologies Inc. All rights reserved.

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 450, Alpharetta, GA 30009, USA

GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6.

This document is only current as of the last updated date stated below and is valid only for use in the Canada. 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.com. 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: 2023-06-29

ca.gcpat.com/solutions/products/daracem-65