

DARACEM[®] 108

Superplasticiser for the production of high workability concrete

Product Description

DARACEM[®]108 is an aqueous solution of chemical dispersants combined with other chemicals which increase its beneficial effects on the quality and plasticity of a concrete mix.

Daracem 108 is a high range water reducer specially formulated for extended slump life. Conventional superplasticisers normally provide only 25 to 45 minutes of slump increase before the concrete begins to lose workability. Daracem 108, however, extends the time span of the slump increase up to twice as long or longer. Daracem 108 is a chemical admixture meeting the requirements of BS 5075: Part 3: 1985.

One litre weighs approximately 1.175kg \pm 0.02kg.

Chemical Action

Daracem 108 neutralises the surface charges on cement particles causing extreme dispersion, resulting in complete, efficient cement hydration which, in turn, greatly increases strength development.

Product Advantages

- Exceptional workability and flowability
- Improved slump retention in flowable concrete
- Works well in manufactured sand concrete
- Good placeability into forms and around reinforcing steel
- Early achievement of form stripping strengths
- Reduced energy requirement for precast/prestress work

Applications

Daracem 108 provides improved slump retention for medium to high workability concrete. It also works well with concrete mixes using manufactured sand for normal and tremie concrete applications.

It can be used in precast/prestress work to reduce the high energy requirement of external heat for accelerated curing. Daracem 108 helps to solve difficult placeability problems such as dense rebar networks or constricted forms and job conditions requiring that the concrete be transported or pumped for long distances. Even at high slump, the concrete consolidates well without segregation. Daracem 108 concrete reaches stripping strengths quickly and finishes easily without the stickiness, tearing and surface drying characteristics sometimes experienced with other high range water reducers.

Compatibility with Other Admixtures

Daracem 108 is compatible with all Portland cement systems, including fly ash, slag and limestone blends. It is also compatible with all admixtures currently available from GCP Applied Technologies, but should be added to the mix separately, and not premixed prior to addition.

Dispensing Equipment

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

Health and Safety

See Daracem 108 Material Safety Data Sheet or consult GCP Applied Technologies.



Addition Rates

Daracem 108 can be dosed at between 400 and 1,800mL / 100kg of cementitious materials. Optimum addition rate depends on the other concrete admixture components, job conditions, and desired performance characteristics.

To assist you in obtaining optimum performance from your GCP admixtures, we offer comprehensive advice and site assistance service backed by trained personnel, experienced in concrete and admixture technology, and the facilities of our fully equipped laboratories.

Overdosing of Daracem 108 will produce an increase in workability, air content and setting time. The set retardation effect will vary, dependent on ambient temperatures, cement used, and amount of overdose. However, provided correct curing procedures are followed, ultimate concrete strengths will be higher than a corresponding mix or standard admixture dosed concrete.

Packaging

Daracem 108 is available in bulk and in 205L drums.

Daracem 108 contains no flammable ingredients.

It will begin to freeze at 0 °C but will reconstitute to full strength after thawing and agitation. In storage and for trouble-free dispensing, Daracem 108 should be maintained at temperatures above 4 °C.

gcpat.hk | For technical information: asia.enq@gcpat.com

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 is a trademark, 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 2017 GCP Applied Technologies, Inc. All rights reserved.

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

GCP (Hong Kong) Ltd., 6 On Chuen Street, On Lok Tsuen Ind Area, Fanling, Hong Kong

This document is only current as of the last updated date stated below and is valid only for use in Hong Kong. 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.hk. 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.hk/solutions/products/daracem-108