

DARACEM[®] 190

High Quality Superplasticizer for Readymixed Concrete

Product Description

DARACEM[®]190 is a liquid concrete superplasticiser that has been developed to allow concrete to attain particularly high performance in both the plastic and hardened states. It is particularly useful for imparting extreme workability to concrete mixes so that large or difficult pours can be made.

Alternatively, DARACEM[®]190 can be utilized to effect large water reductions to achieve high early and subsequent strength. DARACEM[®]190 is an extremely powerful deflocculating agent and performs by dispersing cement into its primary particles dramatically increasing flow characteristics of the cement paste. Main applicational areas are:

- High quality concrete for durable structures
- Ready-mixed concrete , especially during cold season.
- Normal reinforced concrete
- Bridge decks and structural elements
- Precast or in-situ structures DARACEM[®] 190 conforms to the requirements of:
 - EN 934 Part 2
 - UNI EN 934-2
 - BS 5075 Part 3
 - ASTM C 494 Type A and F

Product Advantages

- High compressive strength concrete especially at early ages.
- Low water/cement ratio, excellent durability.
- Good surface finish, providing highly aesthetic concrete appearance.
- Plastic concrete exhibits high cohesion, fluidity and flowability.
- Savings in energy consumption when steam curing is employed.

Technical Data

Appearance	dark brown liquid
Specific Gravity	ca. 1.19 at 20°C
Chloride content	nil
Storage life	12 months from the date of manufacture

Compatibility With Cements

DARACEM[®]190 is compatible with all Portland, pozzolanic and blast furnace cements. It is also compatible with concrete containing fly ash and or silica fume.

Compatibility With Other Admixtures

DARACEM[®]190 is compatible with all GCP Applied Technologies admixtures and particularly can be used in conjunction with air entraining agents. It is advisable to add all admixtures separately to a cementitious mix.

Method of Use

DARACEM[®]190 is supplied ready for use, and should be added to concrete mixes either during the mixing cycle or at the same time as the water, or alternatively it should be added in its supplied form to a normal concrete mix a few minutes before the pour is made.

In the latter case a mixing cycle of at least 2 minutes should be provided to ensure complete dispersion.

Addition Rates

Range: 0.8%–1.5% by weight of cement (800 g–1500 g per 100 kg cement).

The optimum dosage is assessed after preliminary trials depending upon the actual mix constituents and specifications required

Effects of Overdosing

The effects of over-dosing DARACEM[®]190 are a function of the degree of over-dose. Over-dosing of DARACEM[®] 190 will generally produce an increase in workability and its retention, with a slight increase in air entrainment noticeable. There could also be a delay in setting times, depending on the type of cement used and water/cement ratio. If accidental or intentional over-dose has been made, care must be taken to allow for the effect on the stripping time of formwork, if this is of consequence. In such cases, however, provided the concrete is properly cured the ultimate strength will generally be higher than for normal concrete

Dispensing

It is preferable that liquid admixtures for concrete should be introduced into a mixer by means of automatic dispensing equipment, details of which can be supplied upon request.

Health and Safety

For further information see DARACEM[®]190 SDS (Safety Data Sheet), or consult GCP.

Packaging

DARACEM[®]190 is supplied in 230 kg free, non-returnable containers.

Alternatively, bulk deliveries can be arranged.

Storage

DARACEM[®]190 should preferably be stored protected from frost. If the product does become frozen it should be carefully mixed after thawing out to restore it to its normal state.

Technical Service

The Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

gcpat.ae | United Arab Emirates customer service: +971 4 5139560

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 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, Alpharetta, GA 30009, USA

P. O. Box 5006, Office 2104, 21 Floor, The Exchange Tower, Opp. JW Marriott Marquis Hotel, Business Bay, Dubai – United Arab Emirates

This document is only current as of the last updated date stated below and is valid only for use in the UAE. 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.ae. 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: 2022-11-18

gcpat.ae/solutions/products/daracem-190