

# ADVA<sup>®</sup> Cast 620

High early strength and slump retention polycarboxylic superplasticiser for precast concrete

---

## Product Description

ADVA<sup>®</sup>Cast 620 is a polycarboxylic high range water-reducing admixture that is specially designed for producing superior high early strength concrete in precast applications.

ADVA<sup>®</sup>Cast 620 contains no added chloride. It is formulated to comply with specifications for chemical admixtures for concrete: AS 1478 as a Type HWR. One litre weighs approximately 1.070kg ± 0.02kg.

## Product Advantages

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

## Dispersion

ADVA<sup>®</sup>Cast 620 is a superior dispersing admixture, having a marked capacity to disperse cement agglomerates normally found in a cement-water suspension. The capability of ADVA<sup>®</sup>Cast 620 exceeds that of normal water-reducing admixtures (Type WR) and High Range Water Reducers (Type HWR), resulting in lower dosages and better control.

## Uses

ADVA<sup>®</sup>Cast 620 produces concrete with high early strength for precast structural elements, while at the same time achieving high workability for easy and fast placement and consolidation. It also allows concrete to be produced with very low water-cement ratios in low to high slump ranges.

## Addition Rates

Addition rates of ADVA<sup>®</sup>Cast 620 can vary with type of applications, but will normally range from 200 to 800mL / 100kg of cementitious material. In most instances, the addition of 300 to 600mL / 100kg of cementitious material will be sufficient. Should conditions require using more than recommended addition rates, please consult your local Grace representative.

## Compatibility

ADVA®Cast 620 is compatible with most water-reducing admixtures as well as specialty admixtures like accelerators, DCI®Corrosion Inhibitor, ECLIPSE®Shrinkage-Reducing Admixture and V-MAR®3 Rheology-Modifying Admixture. However, it cannot be used in conjunction with DAREX®Super 20, DARACEM®or DARACEM® 19A. 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.

## Dispensing Equipment

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

## Advantages

### Extended Slump Retention

ADVA®Cast 620 has been developed to extend the slump life of concrete. This extended slump life will be very important for concrete placed in large precast units or in high temperature regions.

### Superior Early Strength Enhancement

ADVA®Cast 620 accelerates cement hydration at a very early stage. Together with the very efficient dispersion effect, ADVA®Cast 620 achieves very high early strength for the production of precast structural elements.

### High Workability

ADVA®Cast 620 is ideal for precast applications, where high early strength is desired, and where high workability will aid faster placement and improved mix consolidation. Ideally suited for selfcompacting concrete or super workable concrete applications.

### Superior Surface Finish

ADVA®Cast 620 produces concrete with superior surface finish, without stickiness, tearing or spotty set characteristics.

### Superior Water-Reduction

With up to 40% water reduction possible, ADVA®Cast 620 is highly effective in low water-cement concrete, producing high early strength concrete.

### Optimise Precast Concrete Production

The accelerated set times of ADVA®Cast 620 may 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 costs and increased productivity.

## Packaging

ADVA®Cast 620 is available in bulk.

ADVA®Cast 620 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, ADVA®Cast 620 should be maintained at temperatures above 0°C.

## Health and Safety

Please refer to ADVA®Cast 620 Material Safety Data Sheet or consult GCP Applied Technologies.

[gcpat.com.au](http://gcpat.com.au) | Australia customer service: 1800 855 525

Australia 1800 855 525 New Zealand +64 9 448 1146 China Mainland +86 21 3158 2888 Hong Kong +852 2675 7898 India: Chennai +91 44 6624 2308 Delhi +91 124 402 8923 Indonesia +62 21 893 4260 Japan +81 3 5226 0231 Korea +82 32 820 0800 Malaysia +60 3 9074 6133 Philippines +63 49 549 7373 Singapore +65 6265 3033 Thailand +66 2 709 4470 Vietnam +84 8 3710 6168

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.

ADVA, DCI, ECLIPSE, V-MAR, DAREX and DARACEM 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., 62 Whittemore Avenue, Cambridge, MA 02140, USA

This document is only current as of the last updated date stated below and is valid only for use in Australia. 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.au](http://www.gcpat.com.au). 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: 2021-02-05

[gcpat.com.au/solutions/products/advacast-620](http://gcpat.com.au/solutions/products/advacast-620)