

# ADVA<sup>®</sup> 555

New generation PCE-based superplasticiser

---

## Product Description

ADVA<sup>®</sup>555 is the latest technology in the development of high range water-reducing superplasticising admixtures. It is an innovative, versatile, third generation polycarboxylic ether polymer developed for the premix and precast industries to maximise performance through a wide range of concrete strengths.

ADVA<sup>®</sup>555 contains no added chlorides and complies with AS 1478.1 – 2000 Type HWR. ADVA<sup>®</sup>555 contains no TEA.

## Product Advantages

- Superior slump retention with no retardation.
- High early strength achievement requiring reduced heat energy for curing.
- High compression strengths at all ages.
- Improved surface finish .
- Reduced vibration for placement in reinforced concrete.
- Easy addition during batching process.

## Advantages

- ADVA<sup>®</sup> 555 has been developed specifically for concrete with a wide range of strengths eliminating the need for other superplasticisers for specific applications.
- ADVA<sup>®</sup> 555 produces very high slump concrete at low watercement ratios without segregation and loss of strength.
- It can be added at the batch plant during the batching process eliminating the need for on-site addition.
- It has superior slump retention without retardation.
- Reduction of steam or heat energy curing to achieve high early strengths.
- Requires less vibration for ease of placement in reinforced concrete.
- Improves surface finish and off form finishes

## Dispersion

Unlike conventional superplasticisers, which rely on electrostatic repulsion, ADVA<sup>®</sup>555 has been formulated on carboxylic ether polymers, which are comprised of lateral chains producing superior cement dispersion. Water is absorbed by the polymer, which then allows controlled cement hydration without rapid slump loss or retardation as with conventional naphthalene superplasticisers.

## Application

ADVA<sup>®</sup>555 allows concrete to be produced over a wide range of strengths, at low water-cement ratios with high placement slumps. ADVA<sup>®</sup>555 can produce high flow concrete for tremie and pump mixes that require extended slump life. ADVA<sup>®</sup>555 is ideal for use in general precast and precast/prestressed applications to produce high early strengths with reduced heat energy required for curing.

## Addition Rates

Addition rates of ADVA<sup>®</sup>555 can vary depending on the application, however a typical dose range would be between 400 and 1,000mL / 100kgs total cementitious materials.

At a given water-cement ratio, the slump can be controlled by varying the addition rates. It is recommended that trials are conducted beforehand to determine the optimum dose range to suit your application. If further assistance is required please consult your local GCP representative.

## Compatibility

It is not recommended that ADVA<sup>®</sup>555 be used with DAREX<sup>®</sup>AEA<sup>®</sup> or DAREX<sup>®</sup> LS AEA unless in specific circumstances where trials are carried out prior to use. ADVA<sup>®</sup>555 is compatible with Portland cements including fly ash, blast furnace slag, silica fume and limestone blends. ADVA<sup>®</sup>555 can be used with V-MAR<sup>®</sup>3 to produce high quality, water-tolerant self-consolidating type concretes. It is also compatible with most concrete admixtures from GCP Applied Technologies, however admixtures containing melamine or naphthalene sulphonates should be avoided. All admixtures should be added to the mix separately and not premixed with other admixtures prior to addition. Please consult your local GCP representative for recommendations on compatible admixtures.

## Dispensing Equipment

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

## Health and Safety

See ADVA<sup>®</sup>555 Material Safety Data Sheet or consult GCP Applied Technologies.

## Packaging & Storage

ADVA<sup>®</sup>555 is available in bulk, IBC's, 205L drums and 20L pails. Shelf life is 12 months.

[gcpat.com.au](http://gcpat.com.au) | Australia customer service: 1 800 855 525

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, Darex and AEA 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, Alpharetta, GA 30009, USA

GCP Australia Pty. Ltd., 14 Colebard Street West, Archerfield, Brisbane, Queensland 4108, Australia

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: 2025-05-13

[gcpat.com.au/solutions/products/adva-555](http://gcpat.com.au/solutions/products/adva-555)