

ADVA[®] 635

High Range Water Reducer/Superplasticiser with Enhanced Consistence Retention Performance

Product Description

ADVA[®] 635 is a high performance liquid superplasticiser designed for the production of ready-mixed concrete.

Intended for use in a wide range of concrete applications and as well as a superplasticising effect, ADVA[®] 635 will also provide extended slump retention properties. ADVA[®] 635 is also beneficial with improving the concrete cohesion and is particularly suitable where the use of manufactured sands is preferred. ADVA[®] 635 is based on next generation modified synthetic carboxylated polymers and offers concrete producers the advantages of the latest advances in concrete technology. ADVA[®] 635 conforms to EN 934-2 and is manufactured under controlled conditions to give a consistent product.

Advantages

- ADVA[®] 635 is especially suitable for producing high consistence concrete, with excellent rheology and consistence retention properties
- Using suitable mix designs ADVA[®] 635 can be used to achieve extended consistence life over normal superplasticisers, even with difficult cements
- High consistence concrete with low w/c ratio
- Designed for use with manufactured sands
- Minimal impact on the setting time
- Improved concrete cohesion
- Enhanced pumpability
- Suitable for use in mix designs containing fly ash, ggbs or silica fume
- Dose efficient

Typical Properties

ADVA [®] 635	
Appearance	Amber/Straw Liquid
Specific Gravity (20 °C)	1.06
Alkali Content (eq.Na ₂ O)	1.00%
Chloride Content	Nil
Air Entrainment	1.0 %
Freezing Point	0 °C

Method of Use

ADVA® 635 is supplied ready for use.

When producing high consistence concrete or concrete of low w/c ratio it is recommended that ADVA® 635 be added in its supplied form with part of the batching water, after the addition of the cementitious component. After the addition of admixture, a further mixing cycle of at least two minutes is suggested to enable ADVA® 635 to efficiently disperse the mix components.

Compatibility

With Cements:

ADVA® 635 can be used with most types of Portland cements. It is also effective in concrete containing fly ash or ground granulated blastfurnace slag. For use with special cements we recommend contacting GCP Applied Technologies.

With Other Admixtures:

ADVA® 635 should not under any circumstances be premixed with other admixtures. The performance of the product will be affected by the presence of other chemical admixtures. We recommend that all admixtures be added separately into the mix.

Addition Rates

Range	400 ml - 1200 ml per 100 kg cement
	0.40% - 1.20% (v/w) by wt. of cement
As a guide to trials an addition rate of 0.50 - 0.70% volume by weight of cement is suggested.	
For advice and assistance with trials we recommend that you consult GCP Applied Technologies.	

As with most products of this type, the magnitude of the effect obtained with ADVA® 635 is governed by the quantity of product used, w/c ratio, and the specific nature of the concrete and constituent materials. It is therefore necessary to assess performance under site conditions using actual materials to determine optimum dosage and effect on plastic/hardened concrete properties. such as cohesiveness, consistence retention, set characteristics, early rate of strength gain, ultimate compressive strength and shrinkage when these are of consequence.

Effects of Overdosing

The effect of overdosing ADVA®635 is a function of the degree of overdose.

When producing high consistence concrete, overdosing will increase the level of consistence and may induce the onset of segregation. Depending on the extent of the overdose, an increase in setting time may also occur, especially in low ambient temperatures and/or when employing sulphate resisting cement or cement replacement materials. In any situation where an overdose is suspected, careful inspection of the concrete in its plastic state should be conducted. Pay particular attention to consistency and cohesiveness prior to a decision on the suitability of the concrete for the particular application in question.

Dispensing

It is preferable that the ADVA®635 should be introduced into the mixer by means of automatic dispensing equipment. Equipment or advice on dispensing can be obtained from GCP.

Health and Safety

In line with general chemical handling precautions avoid contact with skin or eyes and protective gloves/goggles should be worn. Read the product label and Safety Data Sheet (SDS) before use. Users must comply with all risk and safety phrases. SDS's can be obtained from gcpat.com.

Packaging

ADVA®635 is supplied in both 15 and 205 non-returnable drums and 1,000 litre totes. Alternatively, bulk deliveries can be arranged.

Storage

If possible, ADVA®635 should be stored away from extremes of temperature and then protected from frost. The product should be kept out of direct sunlight in shaded storage at all times.

Storage Life in Manufacturer 's Drums:

12 months from the date of manufacture.

Storage Life in Bulk Storage:

12 months from the date of delivery.

Technical Service

Our Technical Service department of GCP is available to assist you in the correct use of our performance chemicals.

gcpat.uk | Customer Service: Tel: 01925 855330 Fax: 01925 855350

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GCP Applied Technologies (UK) Ltd, Gate St, Dukinfield SK16 4RU.

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gcpat.uk/solutions/products/adva-635