ADVA® XR 3619 admixture

High Range Water Reducer / Superplasticiser with Consistence Retention and Finishing Enhancement

Product Description

ADVA® XR 3619 admixture is a high performance superplasticiser designed for the production of ready-mixed concrete, for use in a wide range of concrete applications and will also provide extended consistence retention properties.

ADVA® XR 3619 admixture is intended for use with difficult aggregates, enabling the production of concrete with improved rheology and cohesion. ADVA® XR 3619 admixture is based on next generation modified synthetic carboxylated polymers and offers concrete producers the advantages of the latest advances in concrete technology.

ADVA® XR 3619 admixture conforms to EN 934-2; manufactured under controlled conditions to give a consistent product.

Advantages

- ADVA® XR 3619 admixture is specially formulated to be used with difficult materials to produce concrete with improved cohesion and pumpability.
- With suitable mix designs ADVA® XR 3619 admixture can be used to enhance the placement and compaction properties enabling improved surface finish quality, whilst achieving superior dispersion, improved cement hydration and strength enhancement
- ADVA® XR 3619 admixture can be used to achieve extended consistence life over normal superplasticisers, even with difficult cements
- Minimal impact on setting time
- Suitable for use in mix designs containing fly ash, ggbs or silica fume

Typical Properties

ADVA® XR 3619	
Appearance	Amber/Straw Liquid
Specific Gravity (20°C)	1.06
Alkali Content (eq.Na_2O)	1.00%
Chloride Content	Nil
Air Entrainment	1.0 %
Freezing Point	0°C

Method Of Use

ADVA® XR 3619 admixture is supplied ready for use.

When producing high consistence concrete or concrete of low w/c ratio it is recommended that ADVA® XR 3619 admixture is to be added in its supplied form with part of the batching water, after the addition of the cementitious component. After the addition of the admixture, a further mixing cycle of two minutes is suggested to enable ADVA® XR 3619 admixture to efficiently disperse the mix components.

Compatibility with Cements

ADVA® XR 3619 admixture 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.

Compatibility with other Admixtures

ADVA® XR 3619 admixture 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 0.60 - 0.80% 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® XR 3619 admixture is governed by the quantity of product used, w/c ratio, and specific nature of the concrete and constituent materials. It is necessary therefore 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® XR 3619 admixture 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 sulfate-resisting Portland cements or cement replacement materials.

Any situation where an overdose is suspected, careful inspection of the concrete in its plastic state should be conducted. 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 ADVA® XR 3619 admixture should be introduced into the mixer by means of automatic dispensing equipment. Equipment or advice on dispensing can be obtained from GCP Applied Technologies.

Health and Safety

For further information on Health and Safety matters regarding this product we recommend that you consult the relevant Safety Data Sheet from GCP Applied Technologies. In line with general chemical handling precautions avoid contact with skin or eyes and protective gloves/goggles should be worn.

Packaging

ADVA® XR 3619 admixture is supplied in both 15 and 205 non returnable drums and 1,000 litre totes. Alternatively, bulk deliveries can be arranged.

Storage

ADVA® XR 3619 admixture 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 date of manufacture.

Storage Life in Bulk Storage:
12 months from date of delivery.

Technical Service

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

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

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

GCP Applied Technologies (UK) Ltd, 487-488 Ipswich Road, Slough, SL1 4EP

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