# ADVA® Flow 340

High Range Water Reducer / Superplasticiser for Self-Compacting Concrete Applications

## Product Description

ADVA®Flow 340 is a high performance high efficiency, new generation admixture designed to impart extremely high consistence and enable the production of self compacting concrete. ADVA®Flow 340 is based on next generation modified synthetic carboxylated polymers and offers concrete producers the advantages of the latest advances in concrete technology. ADVA®Flow 340 conforms to BS EN 934-2 and manufactured under controlled conditions to give a consistent product.

## Advantages

- ADVA® Flow 340 is extremely efficient, allowing the production of high flow / self-compacting concrete without excessive admixture dosage and at 'normal'water contents.
- Using suitable mix design, self-compacting concrete produced with ADVA® Flow 340, efficiently flows then compacts around rebar reinforcement without blocking or segregation.
- ADVA® Flow 340 will enhance both the concrete pumpability and a combined plasticizing effect allows for high range water reductions, leading to considerable increases in compressive strength,impermeability and durability.
- ADVA® Flow 340 is especially suitable for Precast Factory applications, as is has neutral setting time and high early age strength.

## Method Of Use

ADVA®Flow 340 is supplied ready for use.

When producing high consistence concrete or concrete of low w/c ratio it is recommended that ADVA®Flow 340 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 two minutes is suggested to enable ADVA®Flow 340 to efficiently disperse the mix components.

## Compatibility

### With Cements:

ADVA®Flow 340 can be used with most types of Portland cements.It is also effective in concrete containing fly ash or ground granulated blast slag.

As with most products of this type, the magnitude of the effect obtained with ADVA®Flow 340 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.

For use with special cements we recommend you to contact GCP Applied Technologies.

### With Other Admixtures:

ADVA®Flow 340 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 | 300 ml -1000 ml per 100 kg cement |
| | 0.30% -1.00% (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.

## Typical Properties

| | |
|---|---|
| Appearance | Amber/Straw Liquid |
| Specific Gravity (20°C) | 1.060 |
| Alkali Content (eq.Na 2 0) | 1.00% |
| Chloride Content | Nil |
| Air Entrainment | 1.0 % |
| Freezing Point | 0°C |

## Packaging

ADVA®Flow 340 is supplied in 15 and 205 non returnable drums and 1,000 litre totes.

Alternatively, bulk deliveries can be arranged.

## Storage

ADVA®Flow 340 if possible 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.

## Effects of Overdosing

The effect of overdosing ADVA®Flow 340 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.

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 the ADVA®Flow 340 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.

## Technical Service

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

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Last Updated: 2025-05-15

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