

# ADVA<sup>®</sup> Floor 250

High Range Water Reducer / Superplasticiser for Concrete Floors

## Product Description

ADVA<sup>®</sup>FLOOR 250 is a new generation flooring admixture which combines the workability and strength enhancing properties of polycarboxylate technology with proven GCP shrinkage reducing performance. This unique and patented technology is designed to impart dramatic improvements in workability, compaction finishing properties and ultimate in-place performance of concrete floors. The product is manufactured under closely controlled conditions to give a consistent product.

ADVA<sup>®</sup>FLOOR 250 conforms to EN 934-2.

## Typical Properties

Appearance	Straw liquid
Specific Gravity (20 °C)	1.010
Alkali Content (eq.Na <sub>2</sub> O)	0.25%
Chloride Content	Nil
Air Entrainment	Nil
Freezing Point	0 °C

## Advantages

- Long term drying shrinkage is reduced by 40-50% greatly reducing the risk of cracking in floors
- ADVA<sup>®</sup> FLOOR 250 reduces the primary causes of edge curling in floors and remedial overlays
- For any given bay size, joint opening caused by drying shrinkage will be significantly reduced
- Depending on dosage, ADVA<sup>®</sup> FLOOR 250 will convert low to medium workability concrete into high workability, easily placed concrete
- ADVA<sup>®</sup> FLOOR 250 has near-neutral setting time, reducing 'spotty' or variable set
- ADVA<sup>®</sup> FLOOR 250 allows significant reduction in water/cement ratios, leading to considerable increases in flexural and compressive strength and reduction in permeability

## Compatibility with Other Admixtures

ADVA<sup>®</sup>FLOOR 250 is fully compatible with other products normally used in flooring concrete, including Eclipse<sup>®</sup>Floor Shrinkage Reducing, DCI<sup>®</sup>Corrosion Inhibitor GCP Microfiber<sup>®</sup>and air entraining admixtures.

Each admixture must be added separately. Individually added, each will deliver exactly the results desired.

However, the performance of the material may be affected by the presence of other chemicals and we would recommend that GCP Applied Technologies be consulted in such circumstances.

## Packaging and Storage

ADVA®FLOOR 250 is supplied in 15 or 205 non returnable drums and 1,000 litre totes.

Alternatively, bulk deliveries can be arranged.

ADVA®FLOOR 250 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.

## Method Of Use

ADVA®FLOOR 250 should be added after most of the batching water and the cement component. Allowing a further mixing cycle of at least two minutes to fully disperse the mix components. Adding ADVA®FLOOR 250 to a mixer truck on site, the product should be dosed through a calibrated dispensing system. Where steel fibres are also to be added on site, the ADVA®FLOOR 250 is added to the truck first and mixed at maximum revolutions for two to five minutes before the steel fibres.

## Compatibility with Cements

ADVA®FLOOR 250 can be used with most types of Portland cements. It is also effective in concrete containing fuel ash or ground granulated blastfurnace slag.

## Addition Rates

Range	1000 ml -2000 ml per 100 kg cement
	1.00%-2.00% (v/w) by wt. of cement

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As a guide to trials an addition rate of 1.50% volume by weight of cement is suggested.

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For advice and assistance with trials we recommend that you consult GCP Applied Technologies.

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As with most products of this type, the magnitude of the effect obtained with ADVA®FLOOR 250 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®FLOOR 250 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.

## 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.

## Dispensing

It is preferable that the ADVA®FLOOR 250 should be introduced into the mixer by means of automatic dispensing equipment.

Equipment or advice on dispensing can be obtained from GCP Applied Technologies.

## Technical Service

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

[gcpat.uk](http://gcpat.uk) | United Kingdom customer service: +44 (0) 1480 478421

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