ADVA® CAST 559 (FM)

Superplasticizer for concrete acc. to EN 934-2:T3.1/3.2

Product Description

ADVA CAST 559 (FM) is a highefficiency superplasticising admixture designed to provide a combination of high initial workability, and high early strength.

In addition, ADVA CAST 559 (FM) has been specially adapted for use in mix designs containing manufactured sands or low-quality aggregates. ADVA CAST 559 (FM) reduces the stiffening effect often associated with such materials, resulting in improved flow and slump retention.

The inherent stabilizing behaviour of ADVA CAST 559 (FM) is also beneficial in mixes where segregation or bleeding is experienced with conventional PCE superplasticizers.

Method Of Use

ADVA CAST 559 (FM) is supplied ready for use. When adding ADVA CAST 559 (FM) in the factory, we recommend the dosage together with the gauging water or much better as the latest component. The mixing time after dosage of the agent depends on the mixing energy, whereas a minimum mixing time of 60 seconds must be followed.

Addition of any other chemical admixture should be undertaken separately.

Compatability with Cements

ADVA CAST 559 (FM) can be used with most types of normal cements. For use with special cements we recommend you

to contact GCP Applied Technologies.

Compatability with Other Admixtures

ADVA CAST 559 (FM) should not be premixed under any circumstances with other admixtures. The performance of the product will be affected by the presence of other chemicals and we recommend that GCP be consulted in such circumstances.

We recommend that all admixtures be added separately into the mix.

Addition Rates

Recommended Range: 0.2%-3.00% (v/w) by wt. of cement

As with most products of this type the magnitude of the effect obtained with ADVA CAST 559 (FM) is governed by the quantity of product used, w/c ratio, and the specific nature of the concrete and constituent materials.

It is necessary therefore to assess performance under site conditions using actual materials to determine optimum performance and dosage.

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

Health and Safety

For further information we recommend that you consult the Safety Data Sheet.

Storage and Packaging

ADVA CAST 559 (FM) should preferably be stored away from extremes of cold or heat.

The product should be kept 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.

ADVA CAST 559 (FM) is supplied in non-returnable drums or totes. Bulk deliveries can also be arranged upon request.

Technical Service

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

Typical Properties

Appearance	Light brown liquid
Density (g/cm³)	1,04 ± 0,02
pH Value	4,0 ± 1,0
Chloride Content (m. -%)	< 0,1
Alkali content (m. -%)	< 0,7

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