

Product Data Sheet
Edition 07.2014
Identification No. CA - 8



KEMFLOW SUPER F18

High Range Water Reducing Concrete Admixture

Description

KEMFLOW SUPER F18 is a super plasticizer for high quality concrete in hot climates, To provide excellent acceleration of strength gain at early ages and major increases in strength at all ages. The basic components are synthetic polymers which allow mixing water to be reduced. also it significantly improve the workability of concrete without increasing water demands.

Standards :

Complies with A.S.T.M. C494 type F.

Where to use

- **KEMFLOW SUPER F18** is used as superplasticizer for high quality flow concrete. Its Improved dispersion of the cement particles will increase cohesion at both the flowing and plastic consistency. The occurrence of bleeding and sand runs is substantially reduced. This improving the surface finish achieved.
- Where high early strength is required.
- In complicated formwork or with congested reinforcements.
- Precast concrete elements where high early strength is required.
- Beams and foundations.
- low water cements ratio concrete

Advantages

KEMFLOW SUPER F18 provides the following :

- Without reducing the free water content **KEMFLOW SUPER F18** will produce free flowing concrete giving a flow table value of 51-62 cm (BS 1881). Some minor mix amendments may be required to produce a flowing mix without segregation.
- Improvement in workability without increase in water.
- Accelerated strength after normal setting.
- For high quality finishing.
- Chloride free.

- Water reduction up to 20%

KEMFLOW SUPER F18 used for water reduction. The increase in density and reduction of permeability, improves durability and reduces porosity.

Properties

Nitrate content	Nil
Color	Brown
Specific gravity	1.18 ± 0.05
Chloride content	Nil to BS . 5075

How to use

Theoretical dosage rate:

0.8 – 2.5 % by weight of cement. The optimum dosage for **KEMFLOW SUPER F18** should be determined by site trials with the particular concrete mix under prevailing ambient conditions. Site trails should always be compared with and without **KEMFLOW SUPER F18** to quantify the true value of increase in workability and / or strength gain. As a guide, the dosage will fall into one of two ranges dependent on use.

Overdosing:

An overdose of **KEMFLOW SUPER 18** will result in an increase in retardation as compared to that normally at the intended dosage . The effects of overdosing will be further increased if sulphate resisting cement or cement replacement materials are used. however, no excessive amounts of air will be entrained.

Dispensing :

The correct quantity of admixture should be measured by means of a recommended dispenser. The admixture should then be added to the concrete with the mixing water to obtain the best results.

: Direction for Use

KEMFLOW SUPER F18 should be added to the gauged water, but never to the dry aggregate or cement. Reduction of water is higher if the admixture is added to the concrete after 60-75% of the mixing water has been added.

Curing :

PROKEM recommends the concrete be cured for 24 hours after finishing operations are complete by using **KEMCURE** curing compound. spray applied surface contact curing membranes should be used in all cases .

Job site Mixing:

Add the **KEMFLOW SUPER F18** Concrete admixture to the concrete truck and let drum rotate for 7 minutes before discharge.

Compatibility:

Other admixtures may be used in the same concrete batch with **KEMFLOW SUPER F18** provided that such admixtures are added separately and the combination has no deleterious effect on the concrete.

Cleaning:

Spillage of **KEMFLOW SUPER F18** can be removed with water.s

Packaging:

Available in 25 kg. pails or 220 kg. drums. and tanks 1000 kg.

Shelf life & Storage:

Up to one year when stored in original unopened packaging out of direct sunlight and kept under cover protected from extremes temperature.

Health and Safety

- **KEMFLOW SUPER F18** is non-toxic.
- Use gloves to avoid contact with skin.
- If skin comes in contact, wash immediately with soap and water.
- Do not use solvents.
- Eye contamination must be immediately washed with water, then seek medical treatment.

Additional Information

PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure.

PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction, **PROKEM** extends technical services to include after sales support to assist users in a proper handling of our products.

PROKEM representative must be present at the job site during placement of the first batch of treated concrete. Do not proceed without this representative being present for certification.

Environmental Considerations

KEMFLOW SUPER F18 Admixture is environmentally safe and contains no volatile organic compounds (VOCs).

KEMFLOW SUPER F18 Admixture contains an anti-microbial biocide to inhibit mold and bacteria growth.