

Product Data Sheet  
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## KEMFLOW SUPER FM

High Range Water Reducing Concrete Admixture

### Description

**KEMFLOW SUPER FM** 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 durability by increasing ultimate strength .

#### Standards :

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

### Where to use

- **KEMFLOW SUPER FM** 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.
- For pre - stressed concrete.
- Precast concrete elements where high early strength is required.
- low water cements ratio concrete

### Advantages

**KEMFLOW SUPER FM** provides the following:-

- Without reducing the free water content **KEMFLOW SUPER FM** 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.
- Reducing concrete permeability.
- Accelerated strength after normal setting.
- For high quality finishing.
- Up to 20 % water reduction.
- Improvement in workability without increase in water.
- Chloride free.

- Without reducing the free water content **KEMFLOW SUPER FM** 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	1.19±0.01 at 20°C
Chloride content	Nil to BS . 5075

### How to use

#### Theoretical Dosage rate:

0.8 – 1.5% by weight of cement. The optimum dosage for **KEMFLOW SUPER.FM** 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.FM** 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

**KEMFLOW SUPER FM** is compatible with all types of Portland Cement including S.R.C...

#### Overdosing:

An overdose of **KEMFLOW SUPER FM** 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 FM** 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 FM** 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 FM** provided that such admixtures are added separately and the combination has no deleterious effect on the concrete.

**Cleaning:**

Spillage of **KEMFLOW SUPER FM** can be removed with water.

**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 FM** 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 FM** Admixture is environmentally safe and contains no volatile organic compounds (VOCs).

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