



TOPFLOW SP 603

High Range Water Reducing Superplasticiser for Slump Retention and High Strength concrete

Product Description

TOPFLOW SP 603 is a ready to use, chloride free liquid admixture for concrete which is a specially modified super plasticiser to produce a high strength concrete.

This may be used to have the optimum effect in water reductions without losing the normal setting times and to obtain slump retention and high strength concrete.

Uses

- ❖ To provide excellent acceleration of strength gain at early and later ages by reducing water.
- ❖ Excellently suitable for Ready Mix concrete.
- ❖ To improve the durability by increasing ultimate strengths and reducing concrete permeability.
- ❖ Applications where high workability combined with exceptional pumping and flow properties required.
- ❖ To significantly reduce the water demand and improve the workability of site mixed and precast concrete.

Typical Applications & Advantages

- ❖ Makes major reductions in water/cement ratio which allow the production of high strength concrete without excessive cement contents.
- ❖ Improved workability, cohesion and particle dispersion minimizes segregation and bleeding and improves pumping process.
- ❖ Super plasticizing action reduces or eliminates the need for compaction.
- ❖ Compatible with cement replacements such as micro silica, fly ash, etc.
- ❖ Suitable for Long haul and hot weather concreting.

Standards Compliance

TOPFLOW SP 603 complies with the requirements of the following standards:
(ASTM C494 Type A, B, D, F, and G - BS 5075 Part 1)
Depending on dosage used.

Typical Properties

Appearance	Dark Brown/Black liquid
Specific gravity	1.21 @ 25±2C
Chloride content	Nil.
Flash Point	N/A

Technical Support

TOP BOND provides a full technical support service to specifiers, end users and contractors and is able to offer on-site technical assistance.

Compatibility

TOPFLOW SP 603 can be used for all types of Portland cement and in case of use with any other special cement by doing a trial mix.

Dosage

The optimum dosage of **TOPFLOW SP 603** to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use.

It's preferred to add **TOPFLOW SP 603** after the addition of 60-70% of the mixing water, and as a guide to start the trials; The normal dosage range is between 0.5 to 2.0 litres/100 kg of cementitious material.

Higher dosages than the normal range above can be used to meet particular requirements without causing any adverse effects upon the concrete.

Contact TOP BOND for advice in these cases.



TOPFLOW SP 603

Setting

TOPFLOW SP 603 affords excellent control over initial and final setting times. Setting times of concrete mixes are related to cement type, mix design and ambient temperature.

Effects of Over Dosage

A severe over dosage of **TOPFLOW SP 603** will result in the following:

- ❖ Extended workability in retention.
- ❖ Retardation of initial and final set.
- ❖ Increase in air entrainment.

Provided it is properly cured, the ultimate strength of the concrete will not be adversely affected and will generally be higher than the normal concrete. The retarding effects of very high dosage will be exaggerated with SR cement.

Packaging & Storage

TOPFLOW SP 603 is available in 20 litre & 210 litre drums.

TOPFLOW SP 603 has a minimum storage life of 12 months provided if it is stored under cover, out of direct sunlight.

Health & Safety Precautions

TOPFLOW SP 603 is water based non flammable and does not fall into the hazard classifications of current regulations. However, it should not be swallowed or allowed to come into contact with skin and eyes.

Suitable protective gloves and goggles should be worn. Splashes on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediately – do not induce vomiting.

Important note

TOP BOND ensures that the technical information contained here in this data sheet is true, accurate and represents our best experience.

Although No warranty is given, as **TOP BOND** has no control over the conditions of use and/or the experience of any labor involved in the application which is beyond our control.