



## TOPFLOW PR 30

### High Range Water Reducing Plasticiser / Retarder for concrete

#### Product Description

**TOPFLOW PR 30** is a ready to use, chloride free liquid admixture for concrete which is a specially modified plasticizer / Retarder to produce a high workability concrete.

**TOPBOND PR 30** is a blend of refined lignosulphonates and high molecular weight hydration control agents, designed as a multipurpose admixture that performs as a standard plasticiser at low dosages up to high range water reducing and retarding admixture at higher dosages.

**TOPBOND PR 30** is a powerful plasticiser that disperses and deflocculates the cement particles within a concrete mix. It can be used to improve workability without the additions of extra water, or to allow reductions in free water contents. Cement reductions can also be achieved due to optimum hydration and improved dispersal of cement particles.

#### Uses

**TOPBOND PR 30** is designed for use in all applications where additional, predictable workability retention and improved compressive strengths are required:

- ❖ Hot weather concreting.
- ❖ High workability concrete.
- ❖ Cement reductions and savings.
- ❖ Impermeable concrete.
- ❖ Lower water/cement ratios

#### Typical Applications & Advantages

- ❖ **Set retardation** – reduces cold joints, ensures uniform concrete.
- ❖ **Workability retention** – enables concrete to be placed over extended delivery distances.
- ❖ **Increased workability** – free flowing concrete can be produced to improve compaction and reduce areas of honeycombing.
- ❖ **Compressive strengths** – improved results through optimum hydration of cement.
- ❖ **Low permeability** – higher densities can be achieved as concrete can be readily produced and placed with lower water/cement ratios.

#### Standards Compliance

**TOPFLOW PR 30** complies with the requirements of the following standards:  
(ASTM C494 Type A, B and D - BS 5075 Part 1)  
Depending on dosage used.

#### Typical Properties

<b>Appearance</b>	Dark Brown/Black liquid
<b>Specific gravity</b>	1.205 @ 25±2C
<b>Chloride content</b>	Nil.
<b>Flash Point</b>	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 PR 30** can be used for all types of Portland cement including sulphate resisting. In case of use with any other special cement by doing a trial mix.

If required for a special mix **TOPBOND PR 30** can be mixed with other compatible admixtures from TOP BOND and admixtures being used in the same concrete mix must be dispensed separately and trials must be carried out to determine the performance first.

#### Dosage

The optimum dosage of **TOPFLOW PR 30** 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 PR 30** after the addition of 60-70% of the mixing water, and as a guide to start the trials; The normal dosage range for site batched or ready mixed concrete is between 175 to 300 ml/100 kg of cementitious material.



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For Effecting reductions in water/cement ratio and for hot weather concreting, we recommend a dosage between 300 to 500 ml/100 kg of cementitious material.

For use as a high range admixture in concrete mixes requiring higher workability and extended workability retention, a dosage rate of between 500 & 900 ml/100 kg of cementitious material is recommended.

Contact TOP BOND for advice in these cases.

### Setting

**TOPBOND PR 30** acts efficiently on the cement particles to give controlled retardation of initial set. Setting times will vary according to fineness and type of cement and also concrete temperature.

Delayed setting times are beneficial as they prevent the possibility of cold joints occurring, and note that 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 PR 30** will result in the following:

- ❖ Extended workability in retention.
- ❖ Retardation of initial and final set.
- ❖ Slight 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 PR 30** is available in 20 litre & 210 litre drums.

**TOPFLOW PR 30** has a minimum storage life of 12 months provided if it is stored under cover, out of direct sunlight.

### Health & Safety Precautions

**TOPFLOW PR 30** 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.