



TuffFlow PC 2

High Performance Accelerating Plasticizer

Uses

- To enable pre-cast units to be demoulded in short time.
- To use wherever there is a requirement for accelerated setting times in non-reinforced concrete.
- To obtain early and increased compressive, flexural and tensile strengths.

Typical Applications & Advantages

- High early strength concrete
- Precast Concrete
- White concrete
- Applications of GRC
- Translucent colour enables to use with white cement products.
- Demoulding of precast units can be done in less than 12 hours.

Standards Compliance

TuffFlow PC 2 complies with the requirements of the following standards:
ASTM C 494 Type C & Type E depending on dosage used.

Product Description

TuffFlow PC 2 is a liquid concrete admixture containing accelerating and refined plasticizing aids that produces a product which gives good initial workability and high early strengths for demoulding.

Typical Properties

Appearance	:	Turbid yellow liquid
Specific Gravity	:	1.30 @25±2°C.

Technical Support

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

Instructions for Use

Compatibility

TuffFlow PC 2 is compatible with all types of Portland cements and for use with special cements contacts GIC. Never add **TuffFlow PC 2** to dry cement or dry aggregates.

Dosage Rate

The optimum dosage of **TuffFlow PC 2** to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. The normal dosage range is between 0.80 to 1.60 litres/50 kg of cementitious material. At temperatures below -2°C up to 1.6 litres /50kg may be required. Dosages outside the normal range quoted above can be used to meet particular mix requirements. Contact GIC for advice in these cases.

Setting

TuffFlow PC 2 acts efficiently to give controlled acceleration of initial set. Setting times of concrete mixes are also related to cement type, mix design and ambient temperature.

Effects of over dosage

A severe over dosage of **TuffFlow PC 2** will result in the following:

- Considerable increase in workability.
- Rapid setting.
- Nominal increase in air entrainment.

Provided it is properly cured, the ultimate strength of the concrete will not be adversely affected. In some cases due to air entrainment ultimate strengths may be lower.

Packaging & Storage

TuffFlow PC 2 is available in 20 litre and 210 litre drums. For site installations deliveries will be made in bulk to site storage tanks. **TuffFlow PC 2** has a minimum shelf life of 12 months provided it is stored under cover, out of direct sunlight.

Health & Safety Precautions

TuffFlow PC 2 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.





For further information refer to the Material Safety Data Sheet available for this product.

Important note

GIC endeavors to ensure that the technical information contained herein is true, accurate and represents our best knowledge and experience. No warranty is given or implied, as GIC has no control over the conditions of use and the competence of any labor involved in the application are beyond our control.

As all GIC technical data sheets are updated on a regular basis it is the customer's responsibility to check that the product is suitable for the intended application, and that the actual conditions of use are in accordance with those recommended.

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