

Plastit® PG06

Retarding, Plasticizer Admixture

Uses

- To improve the effectiveness of the water content of a concrete mix.
- At higher dosages to provide a cost effective means of reducing concrete permeability and thereby reducing water penetration.

Advantages

- Allows specified strength grades to be met at reduced cement content or increased workability.
- Water reduction significantly improves compressive strengths at all ages and enhances durability through the production of low permeability concrete.
- Minimizes the risk of segregation and bleeding and assists in the production of a dense, close textured surface, improving durability.
- Chloride free, safe for use in prestressed and reinforced concrete.

Standards compliance

Plastit PG06 conforms with BS 5075 Part 1, ASTM C494 as Type B and Type D and BSEN 934-2.

Description

Plastit PG06 is a chloride free water reducing admixture based on specially selected and blended organic polymers. It is supplied as a brown solution which instantly disperses in water. Plastit PG06 disperses the fine particles in the concrete mix, enabling the water content of the concrete to perform more effectively. The initial hydration of the cement is also delayed, resulting in a delay in the setting time of the concrete with no adverse effect on subsequent stiffening and strength gain.

Typical dosage

The optimum dosage of Plastit PG06 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 0.5 to 1.5 kg/100 kg of cementitious material, including PFA, GGBFS and microsilica.

Properties

Appearance	Light Brown Liquid
Specific gravity	1.03 gr/cm ³ at 20°C
Chloride	Nil to BS5075
Air entrainment	Typically less than 2% additional air is entrained at normal dosages.
Alkali content	Typically less than 5.0 g. Na ₂ O equivalent/litre of admixture. A fact sheet on this subject is available.

Instructions for use

Compatibility:

Plastit PG06 is compatible with other CAPCO admixtures in the same concrete mix. All admixtures should be added to the concrete separately and must not be premixed together prior to addition. The performance of concrete containing more than one admixture should be assessed by trial mixes.

Plastit PG06 is suitable for use with all types of Portland cements, SRC cements and cement replacement materials such as PFA, GGBFS and microsilica.

The use of a combination of admixtures in the same concrete mix and or cement replacements may alter the setting time. Trials should always be conducted to determine such setting times.

Dispensing:

The correct quantity of Plastit PG06 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.

Packaging

Plastit PG06 is available in 20 kg containers and 200 kg drums.

Storage

Plastit PG06 has a minimum shelf life of 12 months provided the temperature is kept within the range of 5°C to 35°C. Should the temperature of the product fall outside this range then contact CAPCO for advice.

Freezing point: Approximately -3°C

Precautions

Health and safety:

Plastit PG06 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.

Fire:

Plastit PG06 is non-flammable.

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Sample Test Results

Table 1:

Plastit PG06 Kg per 100 kg cement	W/C ratio	Air content in fresh concrete (%)	Slump (cm)	Time (day)		
				7	1	28
				Compressive strength (MPa)		
0	0.56	1.7	7	17.3	21.5	31.5
0.5	0.51	2	7	18.5	24.2	36