

POLY CRETE G

High performance super plasticizer water reducing admixture and retarded

Uses

To significantly reduce the water demand of a concrete mix without reducing workability, allowing greatly increased ultimate strengths without additional cement.

- To significantly improve the workability of concrete without increasing water demand.
- Particularly suitable for increasing workability of ready mixed concrete at elevated temperatures.
- To reduce concrete permeability and there, by reduce water penetration and enhance durability.

Advantages

Use in production of flowing concrete permits easier construction with quicker placing and compaction and reduced lab our costs.

- Workability loss in high workability concrete is slower than normally found with superplasticisers.
- Reduction in water/cement ratio enhances durability, producing low permeability concrete with reduced shrinkage cracking potential.

Standards Compliance

POLY CRETE G complies with BS 5075 part 3 and with ASTM C494 Type F & G

Description

POLY CRETE G is a chloride free high performance water reducing admixture based on specially selected and blended organic polymers. It is supplied as a brown solution which instantly disperses in water. **POLY CRETE G** disperses the fine particles in the concrete mix, enabling the water content of the concrete to perform more effectively. The improved dispersion of cement particles enhances the efficiency of hydration.

Technical support

POLYCOO provides a technical advisory service for on-site assistance and advice on mix design, admixture selection, evaluation trials and dispensing equipment.

Dosage

The optimum dosage of **POLY CRETE G** to meet specific requirements should always be determined by trial mixes using the materials and conditions that will be experienced in use. The normal dosage range is from 0.50 to 2.00 liters / 100 kg of cementations material, including PFA, GGBFS and micro silica.

Use at other dosages

Dosages outside the normal ranges quoted above can be used to meet particular mix requirements. Contact **POLYCOO** for advice in these cases.

Properties

Appearance Brown liquid Specific gravity 1.185 to 1.195 at 25°C Chloride content Nil to BS 5075 Air entrainment Typical less than 2% additional air is entrained at normal dosages.

Instructions for use

Mix design

Where the main requirement is to improve strengths, initial trials should be made with normal concrete mix designs. The addition of the admixture will allow the removal of water from the mix whilst maintaining the workability at the levels obtained before the use of the admixture. After initial trials, minor modifications to the overall mix design may be made to optimize performance.

Where the main requirement is to provide high workability concrete, the starting mix design should be suitable for a pump mix. Advice on mix design for flowing concrete is available from **POLYCOO**

Compatibility

POLY CRETE G is compatible with other **POLYCOO** admixtures in the same concrete mix. All admixtures should be added to the concrete separately and must not be mixed together prior to addition. The resultant properties of concrete containing more than one admixture should be assessed by trial mixes.

POLY CRETE G is suitable for use with all types of ordinary Portland cements including Type V and cement replacement materials such as PFA, GGBFS and micro silica.

Dispensing

The correct quantity of **POLY CRETE G** should measure by means of a recommended dispenser. Normally, the admixture should then be added to the concrete with the mixing water to obtain the best results. Contact **POLYCOO** advice regarding suitable equipment and its installation.

Effects of overdosing

An overdose of double the amount of Complots SP337 will result in an increase in retardation as compared to that normally obtained at the intended dosage. Provided that adequate curing is maintained, the ultimate strength of the concrete will not be impaired by increased retardation and will generally be increased. Over dosage may also cause increased air entrainment, which will tend to reduce strength. The degree of this effect will depend on the particular mix design and overdose level.

Packaging

POLY CRETE G is available in drums or bulk supply. For larger users, storage tanks can be supplied.

Storage

POLY CRETE G has a minimum shelf life of 12 months provided the temperature is kept within the range of 2 °c to 50°C. Should the temperature of the product fall outside this range then contact **POLYCOO** Department for advice.
Freezing point: Approximately - 3 °c

Health and safety

POLY CRETE G 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.

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 consult the Material Safety Data Sheet available for this product

Fire

POLY CRETE G is water based and non-flammable.

Cleaning and disposal

Spillages of **POLY CRETE G** should be absorbed onto sand, earth or vermiculite and transferred to suitable containers.

Remnants should be hosed down with large quantities of water.

The disposal of excess or waste material should be carried out in accordance with local legislation under the guidance of the local waste regulatory authority.



Under technical collaboration with

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