



Normal and retarders superplasticizer and high water reducers (N, R, HR) Super Plast PC4000

Description

These Super plasticizers are from the base of carboxylates. Due to their high plasticity, they can be used to make high resistant and durable concrete whose cement to water proportions is low. They can be used in different types of concrete whose resistance is high. The late setting or very late setting type of this super-plasticizer can be used in warm weather conditions and can remove the troubles of early setting of the concrete. Furthermore, we can use them in self compact concrete.

- PC4000 (N): It has high plasticity, however, since it is a normal super-plasticizer it cannot bring about any intensity or retarding in cement setting.
- PC4000 (R): It has high plasticity. Regarding the amount of its use it can bring about 70 to 100 min retard in cement setting and can reduce the troubles of concreting in warm weather.
- PC4000 (H R) : this super-plasticizer has high plasticity and can delay the process of setting efficiently so that ,with regard to its dosage , it can cause delay in cement setting from 80 to 120 minutes.

Advantages and Applications

Appropriate for concreting in warm weather due to their delay in setting

Appropriate for carrying concrete for long distances

Producing appropriate plasticity and preserving the paste quality of the concrete

Concerting their strength in dispersing the cement, they can result in the optimum use of cement.

Reducing the proportion of water to cement and increasing the pressure resistance.

Increasing the durability and shelf life of the hardened concrete

Good agreement with micro-silica

Appropriate for self-compact concrete (SCC)





Dosage

The dosage of each of the PC4000 super-plasticizers is specified with regard to building materials, the design requirements and concreting conditions which are determined by laboratory tests. However, a dosage between 0.2 to 1 percent of the cement weight is recommended.

Notice

Concerning the high plasticity of the PC4000's, enough care should be taken not use them too much as it can result in segregation the loss of adhesion between the building material and the cement paste in the concrete.

How to use

Dissolve the amount taken from the laboratory, then mix the concrete with water or during making the concrete add PC4000 to the water and let mixing operation continues for 3 or 4 minutes. As all super-plasticizers react chemically in water, avoid pouring them on dry materials.

Specifications

Appearance: liquid

Chlorine Ion: without chlorine ion

Density: 1.07 ± 0.02

PH: 6.2 ± 0.5

Shelf time: keep in sealed container out of direct sunlight for 1 year

Packaging and maintenance: keep in 230-kg barrels and 23-kg gallon. Keep in sealed containers in roofed warehouses out of direct sunlight.

Safety points: Super plast pc4000's contain no toxic materials; however, if they are touched by body wash your body with water and soap. If your eyes are touched, wash your eyes with water for, at least, 10 minutes.

Standards: In accordance with ASTM C-494, European standard EN-9342, and Iran 2930 standard.

