Normal and retarders superplasticizer and high water reducers

(N, R, HR) Super Plast PC5000

Description

These super-plasticizers are from the base of carboxylate and are considered to be one of the strongest super-plasticizers. They are used with strong and high resistant concretes .Moreover; we can make high durable concretes with them. Pc5000 could be used to make self-compact concrete (SCC). Regarding the high plasticity and workability of these materials, they can be used to make high dense, durable and impenetrable concrete with low proportions of W/C.

These super-plasticizers are known as the most appropriate types of super-plasticizer for making manmade stones.

● Pc5000 (N): It has high plasticity but since it is a normal super-plasticizer, it can't bring about any intensity or retarding in cement setting.

●Pc 5000 (R): It has high plasticity. Regarding the amount of its use it can bring about 70 to 100 min retard in cement setting.

● Pc 5000 (HR): It has high plasticity. Regarding the amount of its use it can bring about 100 to 150 min retard in cement setting.

Advantages and Applications

- Regarding the retarding of these materials, they are suitable for concreting in warm weather
- Appropriate for carrying concrete in far distances
- Producing appropriate plasticity and preserving the paste quality of the concrete
- Concerning 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)
- The best type of material for making manmade stones and vibrating mosaics.

Dosage

The dosage of each of the Pc5000 super-plasticizers is specified with regard to building materials, the mix design requirements and concreting conditions which are determined by laboratory tests. However, a dosage between 0.1 to 0.7 percent of the cement weight is recommended.

Notice

Concerning the high plasticity of the Pc5000'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 PC5000 to the water and let mixing operation continue for 3 or 4 minutes. As all super-plasticizers react chemically in water, avoid pouring them on dry materials.

Specifications

Appearance: liquid

Without chlorine ion

Density: 1.1 ± 0.02

PH: 6.2 ± 0.5

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

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

Safety points: Superplast pc5000's contain no toxic materials; however, if you touch them, 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.