

Product Information



PICO AQULOC - 2

(New generation concrete superplasticiser for high performance concrete)

DESCRIPTION :

PICO AQULOC - 2 is a high range water reducing (HRWR) new generation concrete superplasticiser based on polycarboxylate chemistry. In contrast to polynaphthalene based superplasticiser which fluidifies negatively charged hydrating cement grains by electrostatic force of repulsion (increase in zeta potential value) accompanied by reduction of surface tension of water, polycarboxylates are adsorbed on cement grains in much larger amount and due to steric hindrance of polyether chains the cement paste is dispersed evenly in the concrete expelling entrained air producing flowing concrete without separation of aggregates and water.

PICO AQULOC - 2 is unique in producing a high slump rheoplastic cohesive and self compacting concrete (SCC) at low water cement ratio with very rapid setting and strength development character coupled with high resistance to chloride ion penetration. All the above parameters are essential for a high performance concrete in civil engineering code standards, establishing polycarboxylates as the state-of-the-art new generation superplasticiser.

ADVANTAGES :

- AQULOC-2 considerably improves the properties of fresh and hardened concrete, inter alia :
- ❖ Improves pumpability of concrete (pumping aid).
 - ❖ Superior rheology-self compacting concrete (SCC) requiring very little compaction during placing into highly congested reinforcement form work.
 - ❖ Almost zero bleeding in superplasticised flowing concrete is its remarkable feature.
 - ❖ Smooth, fairfaced, low porosity compact concrete.
 - ❖ Excellent slump retention at low water cement ratio at tropical climate.
 - ❖ Lower dosages compared to conventional superplasticiser for same grades of concrete in terms of slump retention and set characteristics.
 - ❖ Very high compression and flexural strength at all ages.
 - ❖ Excellent 24 hours compressive strength (High early strength)
 - ❖ High performance concrete (maximum w/c is 0.35 as per High Way Strategic Research Program (SHRP), USA specification for strength & Durability).

A trusted name in Construction Chemicals