



1.19 XPERT SP-PC 2000

Low Dosage Superplasticizer for Concrete

PRODUCT DESCRIPTION

XPERT 2000 Super-plasticizer, Poly-Carboxylate is an exceedingly efficient super-plasticizer which reduces water requirements in concrete up to 30%. XPERT SP-PC 2000 produces highly fluid concrete for easier and faster placement. Higher strength concrete is achieved with substantially lower water/cement ratios and maintaining workability. XPERT 1000 SP-MN attains the necessary workability in the most difficult placement problems without the use of excess water. XPERT SP-PC 2000 is a synthetically manufactured combination of lignosulphonate based, and other proprietary ingredients. The combined characteristics of the lignosulphonate and naphthalene condensates provide beneficial concrete performance in a single super-plasticizer.

BENEFITS

- Comparable strength development to stiff, low slump concrete.
- Increased workability.
- Effortless placement.
- Easier and faster pumping of concrete with pump pressures reduced as much as 50%.
- Increased volume stability.
- Reduced segregation even at high slumps.
- Type I cement early strength development comparable to Type III.
- Greater impermeability.
- Excellent concrete durability.
- Improved appearance of architectural concrete.
- Reduced discharge and turnaround time for trucks.
- Improved resistance to sulfate attack.
- Increased productivity resulting in reduced labor costs, and faster reuse of forms.
- Increased strengths at all ages.

RECOMMENDATIONS

XPERT SP-PC 2000 contains no calcium chlorides. XPERT recommends XPERT SP-PC 2000 for use in all types of concrete including plain, reinforced, extruded, precast and prestressed concretes. XPERT SP-PC 2000 is especially effective in concrete containing such pozzolanic materials as fly ash, silica fume and slag.

APPLICABLE STANDARDS

XPERT SP-PC 2000 meets or exceeds the requirements of ASTM C-494-92, Types A, F & G. XPERT 1000 SP-MN does not contain calcium chloride.

DOSAGE

Dosage rates vary depending upon the amount of plasticity and/or water reduction desired. The recommended dosage range for XPERT SP-PC 2000 is 300 ml to 800 ml per 100 kgs of cementitious material. Trial mixes are suggested in order to determine the required dose age for optimum performance with your concrete components.

DIRECTIONS FOR USE

For optimum results, introduce XPERT SP-PC 2000 towards the end of the mixing process. XPERT SP-PC 2000 maintains its super-plasticized consistency for up to 90 minutes depending on the environmental conditions. Ambient temperature, transport distance, and jobsite delays may dictate jobsite addition of XPERT 1000 SP-MN.

CHARACTERISTICS

CATEGORY	PARAMETERS
Specific Gravity	1.10 @ 20°C
Air Content	>3%
Chloride Content	Nil to BS 5075
Alkali Content	Typically, 72.0 g Na ₂ O

PACKAGING

XPERT SP-PC 2000 is supplied in either 55-gallon/210 lit drums or in bulk delivery. XPERT SP-PC 2000 should be kept from freezing. If accidentally frozen its properties can be restored by thawing and thoroughly re-mixing by mild mechanical agitation.