



1.16 XPERT PC 2500

Admixture for Super-High Strength and Flow-able Concrete

PRODUCT DESCRIPTION

XPERT PC 2500 is a new generation superplasticizer based on polycarb oxylate technology. This product is designed to provide the highest performance of water reduction, while providing excellent flowability during placement, and excellent slump retention without affecting initial setting time. This product incorporates the latest state of the art technology in high performance concrete. XPERT PC 2500 was designed to produce super high-strength concrete, flowable and self-compacting concrete in a variety of applications.

BENEFITS

- Provides a linear dose response to provide desired water reductions. It is recommended for precast, prestressed and block/paving applications, but can also be used in ready-mix concrete where high strength, self-compacting properties are specified.
- Provides a linear response to allow high levels of water reduction as well as maintaining the level of workability for longer periods of time versus conventional superplasticizers.
- Concrete mixes produced can exhibit a cohesive and non-segregating concrete.
- Can produce lower product costs with the ability to better design the superplasticizer performances to jobsite conditions, including faster and easier placement, enhanced finish ability and reduced curing costs.
- More efficient pumping of concrete with pump pressures reduced as much as 50%.
- Reduced discharge and turn-around time for trucks.
- Improves impermeability to reduce sulfate attack.
- Increased productivity, resulting in reduced labor costs.
- Faster reuse of forms.
- Increased strengths at all ages.

RECOMMENDATIONS

XPERT PC 2500 is recommended for use in all types of concrete including plain, reinforced, extruded, precast, prestressed, flowable and self-compacting concrete. XPERT PC 2500 is very effective in concrete containing pozzolanic materials such as fly ash, silica fume and slag.

PACKAGING

XPERT PC 2500 is supplied in either 55-gallon drums (205 liter) or delivered in bulk. XPERT PC 2500 should be kept above -1°C (30°F). If accidentally frozen, its properties can be restored by thawing and thoroughly re-mixing by mild mechanical agitation.

DIRECTIONS

For optimum results, introduce XPERT PC 2500 towards the end of the mixing process. XPERT PC 2500 maintains its super plasticized consistency for up to 90 minutes depending on the dosage and environmental conditions. Factors to consider are ambient temperature, transport distance, and jobsite delays. XPERT PC 2500 can be used in conjunction with and is compatible with all of XPERT's non-chloride accelerators. Combining XPERT PC 2500 with any other admixture containing Naphthalene Sulfonates such as XPERT 1000 SP-MN, may result in a rapid slump loss. Mixing and transporting equipments should be thoroughly washed between subsequent batches of concrete containing Naphthalene Sulfonates and XPERT PC 2500.

CHARACTERISTICS

CATEGORY	PARAMETERS
Specific Gravity	1.10 @ 20°C
Freezing Point	-4 F (20oC)
Chlorides	Nil

APPLICABLE STANDARDS

XPERT PC 2500 meets or exceeds ASTM C-494-98, Types A and F, as well as ASTM C-1017-97. XPERT PC 2500 does not contain calcium chloride.

DOSAGE

Dosage rates vary depending upon the amount of plasticity and/or water reduction desired. Recommended dosage range for XPERT PC 2500 is 3 to 10 ounces per 100 pounds (200 mls to 650 mls per 100 Kg) of cement for most mix designs. XPERT PC 2500C has a linear dosage response so the dosage amount can be precisely tailored to the degree of water-reduction or slump characteristics required for the application. Because of the variability in cements, field conditions, and other ingredients in the mix, it is highly recommended that trial mixes be prepared to determine the optimum dosage for your specific performance requirements.