



SASPlast SP500

High Performance Water Reducing and Super slump Retaining PCE superplasticizer

TECHNICAL PROPERTIES

Specific Gravity	:	1.05 ± 0.02@ 25°C
Appearance	:	Colourless
Air Entrainment	:	1 - 2% depending on Dosage
Chloride Content	:	Nil - Tested to B.S. 5075
Freezing	:	0°C, Mix before use

CONFORMITY

SP500 confirms to the following standard.

ASTM C - 494 - Type F & G, B.S 5075 – Part 1
and ASTM C - 1017

DOSAGE

Recommended dosage range 0.5 – 2.5 % of cement weight. The actual dosage rate applied can exceed the recommended dosage range on common mix design and should be determined in preliminary tests.

Further regulations on maximum dosage rates should be observed.

METHOD OF ADDITION

SP500 is supplied as a ready to use colourless liquid. SP500 can be added to concrete in the mixing cycle after the addition of 60% water or it can be added along with the gauging water. Care must be taken not to add SP500 to dry mix.

SP500 can also be added a few minutes before the actual pouring of concrete for plasticizing effect with lower dosage.

EFFECTS OF OVER DOSAGE

- Results in increased workability
- Slightly higher entrainment
- Delayed Setting

Reason for overdosage must be ascertained to avoid recurrence. Anyway, overdosing will not adversely affect the overall performance of the concrete mix, provided proper curing to be done. Also formwork removal should be delayed to allow the setting. In most cases the compressive strength is more than compared to controlled concrete.

SP500 preferably dispensed by using automatic dispensing equipment.

HEALTH & SAFETY

SP500 is non-hazardous. It is always advisable to avoid contact with skin or eyes. If contact with skin wash with water. Wear protective goggles and hand gloves while handling. If swallowed seek immediate medical attention.

PACKING & STORAGE

SP500 is available in 200 Litre and in bulk to site installed storage tanks. SP500 should be stored in cool, shaded warehouses. Shelf life is 12 months. Before using, homogenize sample by shaking or mixing with a mixer.

After thawing, the product must be used after mixing.



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PRODUCT DESCRIPTION

SASPlast SP500 is a highly effective superplasticizer based on polycarboxylate ether solution especially designed to produce Ready-Mixed Concrete with low water to cement ratio (W/C) and excellent slump retention.

SP500 could be used to affect considerably water reduction and slump retention resulting high performances in both fresh and hardened properties of concrete.

SASPlast SP500 has excellent superplasticizing effects which are able to enhance consistency by several consistency classes and is especially suitable for Self-Compacting Concrete (SCC).

AREAS OF APPLICATION

- To produce Self Consolidating Concrete.
- Highly Flowable Concrete especially recommended for Deep foundations such as piles, piers.
- Ready mix concrete with low water to cement ratio and extended slump retention.
- To produce High strength and High performance Concrete.
- It provides good pumpable concrete for Hot weather Concreting.

BENEFITS

- It makes possible major reduction in water to cement which allows the production of High Strength Concrete without excessive cement content.
- Workability retention for longer period helps the slump loss in case of Hot weather and long haul

Concreting. (More than three hours depending on the dosage, ambient temperature, quality of ingredients and Mix Design).

- Used in the production of flowing concrete with lower pumping pressure.
- Suitable for Highly Reinforced and precast prestressed concrete due to high flow characteristics and its also chloride free.
- Low water to cement results in very high early and ultimate strength.

WORKABILITY

SP500 ensures the flowing concrete remains workable in excess of 180 minutes @ 25°C. Workability loss is dependent on surrounding Temperature, Type of Cement, Nature of Aggregates, method of transport and initial workability.

COMPATIBILITY

SP500 is compatible with all types of Portland cements, SRC cements and other cementitious materials including PFA, GGBS and microsilica.

SP500 is compatible with all SAS concrete admixtures except **Napthalene based**.

All SAS admixtures should be added separately to concrete. Do not mix different admixtures prior to addition.

SP500 does not entrain any air voids into the concrete but even reduces them.