TECHNICAL DATA SHEET

TriStar PCE CT50

A High Range Water Reducing and Clay Tolerant PolyCarboxylate Ether (PCE) Polymer

TriStar PCE CT50 is a comb-type Polycarboxylate Ether Polymer. It is least sensitive to clay-bearing aggregates. It is hard to be intercalated or adsorbed by clay crystal structure. TriStar PCE CT50 can meet the requirement of high clay-bearing concrete for enhanced workability.

TriStar PCE CT50 is a base material for third-generation superplasticizer/concrete admixture. The product features:

- High Water Reducing ability
- Good Retention workability
- Low air entrainment
- Especially applicable for high clay-bearing materials
- Improve clay tolerance of other products as functional mother liquid
- High compatibility with cements and mineral admixtures
- Good surface appearance of concrete

Advantages:

- Cost-saving through utilizing high clay aggregates
- Generate self-filling concrete by creating high fluidity
- High durability through increased strength
- High strength concrete with low W/C

Specifications:

Property	Value	Method
Appearance	Pale to Light Yellow Liquid	Visual
Concentration	Min 50%	160˚C for 20min
pH (undiluted)	3-7	Stock solution
Specific Gravity	1.085-1.12	Hydrometer, 22˚C
Viscosity	<2000	22˚C, No.3, 60rpm

Application:

- Raw material for PCE based concrete admixtures
- High strength concrete
- Ready-mixed concrete
- Pre-cast concrete
- High fluidity concrete

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- Self-compacting concrete
- Concrete for high-rise building and complex structures

Recommended Usage:

The Product has a recommended dosage range of 0.1-1.0 liters/100kgs of binders on a basis of undiluted solution. It is recommended to be used in combination with PCE superplasticizers. It can also be used alone when the clay-content is high.

The optimum dosage of the Product may depend on specific requirements of concrete properties and materials. It can be determined by trials using the materials and conditions. Sodium gluconate is recommended to adjust the setting-time if necessary.

Side effects of Overdosing:

Overdosing can cause the segregation of concrete materials and thus the strength of concrete may become severely lower than the target value.

Compatibility:

All our PCE product line is well compatible with each other. To achieve either higher water reduction or longer retention, proper blending with other type of PCE is recommended to achieve demanding result. The product is compatible with LignoSulfonate-based plasticizers, but NOT compatible with SNF based ones.

Storage & Handling

The Product should be stored at room temperature and should be avoided from direct sunlight. If stored in original unopened container, it will have a shelf life of twelve (12) months. If product is frozen, please agitate it slowly until it melts again.

Packing

Bulk (21,000Kgs/Flexi Tank) or 1,100 Kgs/IBC Tote

Precautions

The Product contains no hazardous materials and is completely transport class free. However, it is recommended to use standard handling procedures with the product. Wear gloves and eye protection and was splashes to the skin with soap and water at the end of shifts or at breaks. For more information, please refer to the Material Safety Data Sheet.

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