



TriStar PCE HB50

A Hybrid High Range Water Reducer and Slump Controller PolyCarboxylate Ether (PCE) Polymer for Concrete

TriStar PCE HB50 is a comb-type Polycarboxylate Ether Polymer, with a well-balanced dual performance of reasonable water reduction and slump retention. It will ensure the cost-effectiveness and adaptability of all ranges of concrete with good water reduction, improved workability, and concrete properties.

TriStar PCE HB50 is a base material for third-generation superplasticizer/concrete admixture. The product features:

- Balanced performance of water-saving and slump retention
- Excellent workability in concrete
- Good fluidity due to the low viscosity of concrete.
- Dosage flexibility
- High compatibility with types of cement and mineral admixtures
- Good compatibility with materials containing high content of powder or clay
- Good surface appearance of concrete

Advantages:

- Low Stickiness in concrete
- Maintaining initial concrete properties without delayed setting
- Maintaining optimal workability
- Cost-saving through enhancing performance
- Compatible with various PCEs
- High durability through increased strength
- High-strength concrete with low W/C

Specifications:

Property	Value	Method
Appearance	White to Light Yellow Liquid	Visual
Concentration	Min 50%	160°C for 20min
pH (undiluted)	2-5.5	Stock solution
Specific Gravity	1.085-1.12	Hydrometer, 25°C
Viscosity	450-800	25°C

Application:

- Raw material for High Range and Mid-Range PCE type superplasticizers blending
- High strength concrete

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- Ready mix concrete
- Precast concrete
- Concretes requiring low stickiness
- General strength concrete
- Concrete for skyscrapers and large size buildings

Recommended Usage:

The Product has a recommended dosage range of 0.3-1.0 liters/100kgs of binders on a basis of undiluted solution. We recommend diluting it as per the application. Sodium gluconate is recommended to adjust the setting time if necessary. The optimum dosage of the Product may depend on the specific requirements of concrete properties and materials. It can be determined by trials using the materials and conditions.

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 types of PCE is recommended to achieve the 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 the original unopened container, it will have a shelf life of twelve (12) months. If the product is frozen, please agitate it slowly until it melts again.

Packing


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

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 splash the skin with soap and water at the end of shifts or during breaks. For more information, please refer to the Material Safety Data Sheet.

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