

High-range water-reducing early-strength superplasticizer

DESCRIPTION

DUCONMIX ES PCE 860 is a chloride-free, high-range water-reducing superplasticizer based on modified polycarboxylate ether (PCE) technology. It provides high workability, early strength development and improved durability for precast, self-compacting, ready-mix and high-performance concrete applications.

RECOMMENDED USE

- Precast Concrete
- Self-Compacting Concrete (SCC)
- Ready-Mix Concrete
- High-Performance Concrete
- High-Strength Concrete
- Prestressed Concrete
- Congested Reinforcement
- Cold Weather Concreting

FEATURES AND BENEFITS

- Advanced PCE technology
- High water reduction
- Early strength development
- Excellent workability
- Low water/cement ratio
- Reduces segregation and bleeding
- Improves surface finish
- Faster curing cycle
- Enhances durability and strength

PRODUCT INFORMATION

Standard Compliance	ASTM C494 Type A & F, EN 934-2, IS 9103
Chemical Base	Modified polycarboxylate ether
Recommended Dosage	0.3–1.5% by weight of cement
Water Reduction	Up to 30%
pH	≥ 6
Chloride Content	Chloride-free
Compatibility	PPC, supplementary cementitious material
Packaging	5, 10, 20 & 250 kg
Shelf Life	12 months

APPLICATION PROCEDURE

General

DUCONMIX ES PCE 860 shall be used in accordance with recommended application guidelines and should only be added by trained and qualified personnel. The optimum dosage shall be established through laboratory or site trial mixes.

Preparation

Ensure all concrete constituents are accurately batched and comply with the project specifications. DUCONMIX ES PCE 860 is supplied ready for use and should not be diluted.

Mixing Procedure

Add DUCONMIX ES PCE 860 together with the mixing water. For optimum performance, introduce the admixture after approximately 50–70% of the mixing water has been added to the concrete mix. Do not add directly to dry cement or aggregates. Continue mixing for a minimum of 60 seconds after addition to obtain a uniform and homogeneous concrete mix.

Placing & Curing

Place, compact and finish the concrete in accordance with good concreting practice. Proper curing is essential to achieve optimum early strength, long-term durability and surface quality, particularly in hot, dry or windy conditions.

Compatibility

DUCONMIX ES PCE 860 is compatible with Portland cement and supplementary cementitious materials such as fly ash, GGBS, silica fume and metakaolin. It should not be used in conjunction with melamine- or naphthalene-based admixtures in the same concrete mix.

Precautions

Wear suitable PPE. Avoid contact with eyes and skin. Do not ingest. Store properly and refer to SDS before use. Do not exceed recommended dosage. Trial mixes are recommended before production.

Statement of Responsibility (Disclaimer)

The technical information and application advice are based on present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a products suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.