

PCE-based retarding superplasticizer

DESCRIPTION

DUCONMIX RSP PCE 830 is a high-performance, chloride-free, polycarboxylate ether (PCE)-based retarding superplasticizer designed to produce highly workable concrete with extended slump retention and reduced water demand. It improves workability, strength, durability, and placing efficiency for ready-mix, pumped, and high-performance concrete.

RECOMMENDED USE

- Ready-mix concrete
- Pumped concrete
- Long-distance concrete transportation
- High-performance concrete
- Congested reinforcement and complex formwork
- Mass concrete
- Bridges, tunnels and infrastructure projects

FEATURES AND BENEFITS

- Advanced PCE technology
- High water reduction
- Excellent slump retention
- Improved pumpability
- Reduces segregation and bleeding
- Controlled setting time
- Better surface finish
- Enhances strength and durability

PRODUCT INFORMATION

Standard Compliance	ASTM C494 Types B, D & G; EN 934-2; IS 9103 DA
Chemical Base	Modified polycarboxylate ether (PCE)
Recommended Dosage	0.3–1.5% by weight of cement
Water Reduction	Up to 30%
pH	≥ 6
Chloride Content	Chloride-free
Compability	all cement types
Packaging	5, 10, 20 & 250 kg
Shelf Life	12 months

APPLICATION PROCEDURE

General

DUCONMIX RSP PCE 830 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 site trial mixes.

Preparation

Ensure all concrete constituents are clean, accurately batched and comply with project specifications. DUCONMIX RSP PCE 830 is supplied ready for use and should not be diluted unless approved by the technical department.

Mixing Procedure

Add DUCONMIX RSP PCE 830 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 until a uniform and homogeneous concrete mix is obtained.

Ready-Mix Concrete

For transit mixer applications, the admixture may be added through the truck feed hopper. Rotate the drum at approximately 10 rpm for a minimum of 3 minutes before discharge to ensure complete dispersion throughout the concrete.

Placing & Curing

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

Compatibility

DUCONMIX RSP PCE 830 is compatible with ordinary Portland cement and supplementary cementitious materials such as fly ash, GGBS, silica fume and metakaolin. Trial mixes are recommended before use with other chemical admixtures.

Statement of Responsibility (Disclaimer)

The technical information and application advise are based on present state of our best scientific and practical knowledge. As the information herein 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.