

DUCONMIX WR SP

300

TECHNICAL DATA SHEET (TDS)



High-range water-reducing early-strength superplasticizer

DESCRIPTION

DUCONMIX WR SP 300 is a chloride-free, high-range water-reducing superplasticizer based on advanced PCE technology. It provides excellent workability, early strength development and improved durability for precast, rheoplastic and high-performance concrete applications with low water/binder ratios.

RECOMMENDED USE

- Precast concrete
- Ready-mix concrete
- High early-strength concrete
- Self-compacting concrete (SCC)
- Cold weather concreting
- Low water/binder ratio concrete
- High-strength and high-performance concrete

FEATURES AND BENEFITS

- Advanced PCE technology
- High early strength
- High water reduction
- Excellent workability
- Low water/binder ratio
- Faster curing cycle
- Improved surface finish
- Enhanced durability
- Suitable for precast concrete

PRODUCT INFORMATION

Standard Compliance	ASTM C494 Type F, EN 934-2, IS 9103
Chemical Base	Modified polycarboxylate ether (PCE)
Recommended Dosage	0.3–1.5% by weight of cement
Water Reduction	Up to 35%
pH	≥ 6
Chloride Content	Chloride-free
Compatibility	All cement types
Packaging	5, 10, 20 & 250 kg
Shelf Life	12 months

APPLICATION PROCEDURE

General

DUCONMIX WR SP 300 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 WR SP 300 is supplied ready for use and should not be diluted.

Mixing Procedure

Add DUCONMIX WR SP 300 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, durability and surface quality. In hot, dry or windy conditions, appropriate curing methods shall be adopted to minimize moisture loss.

Compatibility

DUCONMIX WR SP 300 is compatible with all types of cement. Trial mixes are recommended before use with supplementary cementitious materials or other chemical admixtures to verify compatibility and performance.

Precautions

Wear suitable PPE. Avoid contact with eyes and skin. Do not ingest. Store properly and refer to SDS before use.

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.