

HYDROPLAST - 300

High Performance Water Reducing (PCE) Super-plasticizer

Product Description:

HYDROPLAST-300 is a third generation high performing polycarboxylate ether super-plasticizer with impressive water reducing properties. HYDROPLAST-300 allows for the production high consistency mixed batches with low water-cement ratio, ensures extended workability and improves early and final strength development. HYDROPLAST-300 is suitable for HOT and Cold Weather climate, minimizes bleeding and segregation tendencies. HYDROPLAST-300 is specifically engineered for the ready mix and precast industry, where high water reduction and consistently mixed batch is of paramount importance.

Working Principle:

HYDROPLAST-300 improves the cement dispersion within the concrete significantly. This property allows for the formation of a homogeneous and low viscosity cement paste which ensures an improved workability and impressive water reduction.

Primary Uses:

HYDROPLAST-300 is typically used to produce:

-) Ready mix concrete
-) Precast concrete
-) Used in concrete where high water reduction and improved workability is desired.
-) Mass-concrete pours.
-) Ready-mixed concrete.
-) Long distance transportation of concrete.
-) Pumped concrete.
-) Hot weather concreting.
-) All concrete works where good workability and increased waterproofing properties are required. Such as: swimming pools, sea walls, tunnels, bridges, basement, etc.

HYDROPLAST-300 has been incorporated in concrete used for:

-) All types of high rise construction
-) Sea ports and dams
-) Pre-stressed beams
-) Foundation piles
-) Diaphragm wall
-) Towers and chimneys
-) Tunnel linings
-) Irrigation canals
-) Airfield runways and roads

Advantages:

-) Better customer satisfaction is achieved because the concrete producer can consistently produce and deliver quality concrete
-) Reduced mixing water while maintaining same workability.
-) Improved workability, air entrainment & placement properties.
-) Improved physical & mechanical properties.
-) Reduces the need for job site adjustment of slump and workability
-) Improved cohesion minimizes risks of segregation, bleeding and creep.
-) Denser concrete improves waterproofing properties and protection of reinforcement steel against detrimental water-borne ion attack.
-) Chloride-free; suitable for pre-stressing.
-) Specially formulated for hot weather concreting.
-) Increased compressive and flexural strength of concrete both at early and final stage.

Standards:

HYDROPLAST-300 is formulated to comply with all the requirements of:

-) ASTM C- 494, Type F
-) EN 943, Part 2, Tables 1 and 2

Technical Properties:

Appearance: light blue or colourless liquid

Specific gravity: 1.175 ± 0.005 at 20°C

Chloride content: Nil

Additional air-entrainment: Less than 1 %

Water-reduction: 20-30 % of mixing water

Permeability: Reduces concrete porosity, improves waterproofing and durability.

Compressive strength: Increased early and ultimate compressive strengths

Cohesion: Improved cohesion reduces risk of segregation

Compatibility: Compatible with all types of Portland cement including Sulfate Resisting Cement (SRC)

Dosage Range:

Dosage is influenced by cement type, mix design, quality of used materials, ambient temperatures and other specific requirements, so site trials should be carried to determine the optimum dosage.

Dosage: 0.5- 2.5 % of cement content (250ml -2500ml for 50 kg of cementitious material)
HYDROPLAST-300 is packed in 25 litres keg, 210 litres drum

Dispensing:

HYDROPLAST-300 should be added with the last third of mixing water or immediately after complete mixing water addition. Do not add directly to the dry mix or cement. For proper administration an automatic dispenser shall be used.

Overdosing:

An overdose of HYDROPLAST-300 may result depending on dosage in an increase of workability and extension of setting time. Overdosed concrete must be protected against direct sun light and water evaporation.

Limited Warranty

All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty either expressed or implied. User shall rely on his or her own information and tests to determine suitability of the product for the intended use and user assumes all risk and liability resulting from his or her use of the product. Nothing contained in any supplied materials relieves the user of the obligation to read and follow the warnings and instruction for each product as set forth in the current Technical Data Sheet, product label and Safety Data Sheet prior to product use away.

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