

HYDROPLAST - 600

Fourth Generation (PCE) High Performance concrete Pumping Super-plasticizer

Product Description:

HYDROPLAST-600 is a 4th generation high performing polycarboxylate ether super plasticizer for self compacting and pumped concrete with impressive water reducing, extended slump retention and anti bleeding and segregation properties.

HYDROPLAST-600 allows for the production high consistency mixed pumped concrete with low water - cement ratio, ensures a controlled extended workability and improves early strength development. HYDROPLAST-600 is suitable for HOT climate, minimizes bleeding and segregation tendencies.

Working Principle:

HYDROPLAST-600 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, extended workability and slump retention.

Primary Uses:

HYDROPLAST-600 is typically used to produce:

- Ready mix concrete to be pumped
- Self compacting concrete

HYDROPLAST-600 has been incorporated in concrete used for

- All types concrete work including high rise construction
- GGBS concrete
- Foundation
- All concrete Requiring increased Strength, workability, good slump, water Reduction and reduced permeability

Benefits

-) Desired Strength can be achieved by reducing cement contents to meet specified Strength without loss of workability
-) Reduced mixing water while maintaining same workability.
-) Improves the quality of concrete by increasing workability, while reducing the water Cement ratio & pumping properties.
- Improved physical, mechanical properties, early and ultimate strength of concrete
- Produces flowable, cohesive and non segregating SCC concrete
- 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.
- Water-based, non-flammable, non-toxic.
- Chloride-free; suitable for pre-stressing.
- Specially formulated for hot weather concreting.
- Increased compressive and flexural strength

Standards:

HYDROPLAST-600 is formulated to comply with all the requirements of:

- ASTM C- 494,
 - Type AEN 943, Part 2, Tables 1 and 2
- HYDROPLAST 600 is compatible with all types of Portland cement

Technical Properties:

Appearance:	Light Blue liquid or Colorless
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 durability.	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).Compatible with other ARMORSIL admixtures when dispensed separately

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: typically 0.8% to 1% by the weight of total cementitious content (cement + replacers if used). 500ml-1000ml to 50kg cement

Dispensing:

HYDROPLAST-600 May be added with the initial mix water or should be added with the last

third of mixing water. However optimum water reduction is achieved with delayed addition. Do not add directly to the dry mix or cement. For proper administration an automatic dispenser could be used.

Overdosing:

An overdose of HYDROPLAST-600 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 to allow proper curing.

Do not use HYDROPLAST 600 with other type of admixture containing Naphthalene Sulfonate Blends. The performance of the admixture will be adversely affected.

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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