

# **HYDROPLAST 100**

# Complete High Performance Water Reducing Superplasticizer

# Product Description:

HYDROPLAST-100 is a high performance, liquid, water-reducing "plasticizer" admixture formulated to improve workability, reduce permeability and improve durability. Once incorporated in the mix, HYDROPLAST-100 is adsorbed on the cement particles' surface inducing a powerful deflocculating property, effectively reducing the concrete mixing water demand and improving physical and mechanical properties of the resultant concrete. HYDROPLAST-100 is based on a blend of SNF and organic modifiers designed with the main purpose of reducing workability loss.

## Primary Uses:

Towers and chimneys

Tunnel linings
Irrigation canals

J	AST-100 is typically used to produce: Ready mixed concrete Precast concrete Used in concrete where delayed setting and extended workability are desired. Mass concrete pours. 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.
HYDROPLAS	ST-100 has been incorporated in concrete used for
<i>J</i> ,	All types of high rise construction
J	Large sea ports and dams structures
J	Pre-stressed beams
J	Foundation piles
J	Diaphragm wall

#### Advantages:

)	Reduced mixing water while maintaining same workability.
J	Improved workability & pumping properties.
J	Improved physical & mechanical properties.
J	Improved surface finish.
J	Improved cohesion minimizes risk of segregation, bleeding and creep
J	Denser concrete improves waterproofing properties and protection of reinforcement steel against detrimental water-borne ion attack.
J	Water-based, non-flammable, non-toxic.
J	Chloride-free; suitable for pre-stressing.
J	Specially formulated for hot weather concreting.
J	Increased compressive and flexural strength

#### Standards:

#### Technical Properties:

Appearance: Dark brown liquid Specific Gravity:  $1.175 \pm 0.005$  at  $20^{\circ}$  C

Chloride content: Nil
Additional air-entrainment: Less than 1 %

Water-reduction: 10-15 % 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: typically 1-2% by the weight of total cementitious content (1-2 kg for 100 kg of cementitious material) **Hydroplast 100 is packed in 25litres keg, 210 litres drum** 

#### Dispensing:

HYDROPLAST-100 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 should be used.

#### Overdosing:

An overdose of HYDROPLAST-100 may result depending on dosage in an increase in 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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