



HIGH RANGE WATER-REDUCER / NEW GENERATION SUPERPLASTICIZER CONCRETE ADMIXTURE

Description: HYPERPLUS 2100 / 2100 S / 2100 W is a specially designed, modified polymer-based, next-generation, early strength-enhancing, highly water-reducing superplasticizer concrete admixture. The product is engineered to provide optimized rheology control and climate-adapted setting performance, ensuring consistent concrete behavior under varying ambient temperature conditions.

Technical Properties:

Chemical Content	Polycarboxylate polymer
Appearance	Liquid
Color	Light brown
pH	4 - 6
Density (20 °C)	1.08 – 1.12 g/cm ³
Chloride Content (%)	< 0.1
Alkaline Content (%)	< 5
Freezing	-10 °C

Advantage:

- High water reduction, resulting in higher density, higher strength and reduced permeability.
- Easier and faster pumping of concrete.
- Increased workability and easier placeability.
- Allows contractors to finish the concrete early.
- Increased concrete durability and uniformity.
- Reduced shrinkage and cracking.
- Reduced rate of carbonation of the Concrete.
- Extended slump retention.
- Does not contain chloride or any other substances that may cause corrosion.

Area of Use:

- Ultra High-performance Concrete (UHPC).
- Self Compacted Concrete (SCC).
- Wet Precast Concrete.
- Pumped Concrete.
- Durable Concrete.

Dosage: The recommended dosage of HYPERPLUS 2100 / 2100 S / 2100 W is between 0.3 – 2.0% by weight of the total binder content in the concrete mix design. The specified dosage may vary depending on the type of cement, aggregate properties, mineral additions, water content, and the required fresh and hardened concrete performance characteristics. The optimum dosage should be determined through laboratory trials based on the specific project requirements, and the final mix proportions should be established accordingly. When it is required, the Shva Co. technical support unit should be consulted.

Method of Application: HYPERPLUS 2100 / 2100 S / 2100 W should be added to the mixing water or directly into the concrete mix during batching. It is recommended not to add the admixture to dry cement. Ensure adequate mixing time after addition to achieve uniform distribution throughout the concrete. For optimum performance, trial mixes are strongly recommended before large-scale production to verify workability, setting behavior, and strength development under specific project conditions.

Usage According to Weather Conditions:

- In winter months: HYPERPLUS 2100 W
- In summer months: HYPERPLUS 2100 S
- In transitional seasons: HYPERPLUS 2100

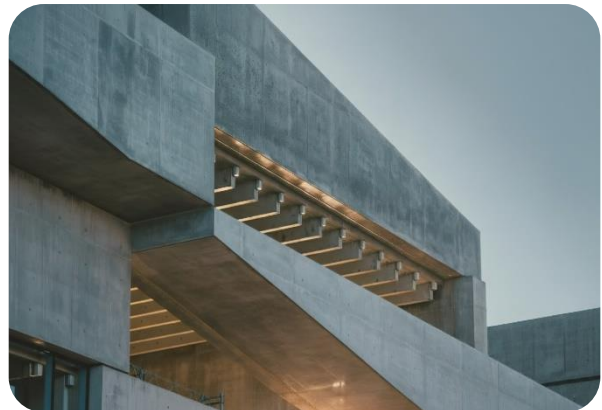
Standards:

- HYPERPLUS 2100: EN 934-2 Table 3.1-3.2
ASTM C 494 Type F
- HYPERPLUS 2100 S: EN 934-2 Table 11.1-11.2
ASTM C 494 Type G
- HYPERPLUS 2100 W: EN 934-2 Table 3.1-3.2
ASTM C 494 Type F

Compatibility: HYPERPLUS 2100 / 2100 S / 2100 W admixture is compatible with other Shva Co. admixtures used in the same concrete mix. If more than one type of admixture will be used in the concrete mix, they must be dispensed to the concrete separately.

Precautions in Application:

- It should not be used or mixed with naphthalene-based additives.
- Do not exceed the recommended dosage without prior laboratory verification.
- Always perform trial mixes before full-scale production.
- Do not add directly to dry cement; ensure addition into mixing water or fresh concrete.
- Adjust dosage in case of changes in cement type, aggregate grading, mineral additions, or ambient temperature.
- Protect the product from frost and direct sunlight.
- Ensure proper mixing time to achieve homogeneous distribution.
- Compatibility with other admixtures must be tested before combined use.
- Use appropriate personal protective equipment during handling.



Cleaning: HYPERPLUS 2100 / 2100 S / 2100 W admixture can be washed with fresh cold water and should not be allowed enter sewers or open bodies of water.

Packing: 25 kg plastic drum - 200 kg drum - 1000 kg container Bulk

Storage and Shelf Life: Must be stored at temperatures between +5°C and +35°C. Under proper storing conditions, the product's shelf life is 12 months from production date if kept in original packaging unopened and undamaged. Packaged products must be shaken before use.

Security Information: Use protective clothes, gloves, glasses and mask compatible with Health and Safety regulations during the application. It should not contact skin and eyes. In case it contacts to skin and eyes, rinse it with water and if swallowed ask for medical help. Food and beverage should not be allowed in the application area. It should be stored at the reach out of the children. The Material Safety Data Sheet (MSDS) should be read for detailed information.

