



### Description:

HYPER PLUS Admixture is a next-generation superplasticizer developed with polycarboxylate technology. It provides exceptional water reduction-up to 40%-which translates into highly workable concrete with rapid early strength and outstanding durability. By optimizing the cement paste, it increases both initial and ultimate compressive strength while enabling lower cement content. Because of its strong influence on mix behavior, the product should always be used with precise control to ensure consistent, reliable performance.

### Technical Properties:

<b>Chemical Content</b>	Polycarboxylate polymer
<b>Appearance</b>	Liquid
<b>Color</b>	Brown
<b>pH</b>	4 - 7
<b>Density (20 °C)</b>	1.08 – 1.12 g/cm <sup>3</sup>
<b>Chloride Content (%)</b>	< 0.1
<b>Alkaline Content (%)</b>	< 5
<b>Freezing</b>	-10 °C

### Advantage:

- This admixture lowers the water-cement ratio, enhancing durability and reducing permeability.
- It accelerates setting and early strength development, allowing quicker formwork removal and earlier load application.
- Workability is enhanced even at reduced water content, producing stronger, denser, and more durable mixes.
- Including self-compacting concrete.
- It increases both initial and final strength.
- Performs reliably in cold-weather conditions.
- Can reduce bleeding and segregation compared to uncontrolled mixes.

### Area of Use:

- In cold-weather concreting, admixtures accelerate setting and strength gain, preventing delays and reducing downtime.
- In precast and prestressed concrete production, early demolding and faster turnover are achieved through rapid strength development, which optimizes productivity.
- For tunnel works, admixtures enabling quick initial hardening and minimizing rebound loss are critical to improve safety and efficiency.
- In repair and rehabilitation projects, accelerated strength allows early reopening to traffic or service, reducing operational interruptions.
- For high-performance concrete mixes, the ability to lower the water-cement ratio while securing rapid early strength is essential to achieve superior durability and long-term structural reliability.

**Dosage:**The recommended dosage of HYPERPLUS A is between 0.4 – 0.8% 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.

### Packing:

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

**Method of Application:**HYPERPLUS A 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.

### Standards:

- HYPERPLUS A: EN 934-2 Table 11.1-11.2  
ASTM C 494 Type G

**Compatibility:**HYPERPLUS A 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:

- 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 A admixture can be washed with fresh cold water and should not be allowed enter sewers or open bodies of water.

### 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.

