



Description:

HYPER PLUS admixture is Ultra Super-plasticizers formulate that is based on polycarboxylate acid. This product is made of selected polymers specially designed to make the water content of the concrete work more effectively to achieve concrete strength gradually until the final stage of drying with flow concrete to achieve the highest durability of concrete. This effect can be used to improve workability, to increase final strengths. or to facilitate a reduction in cement content while maintaining mix properties. HYPER PLUS gives high slump increase with the same amount of water, set retarding slump retention admixtures that enhance finish quality.

Technical Properties:

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

Advantage:

- This admixture lowers the water-cement ratio, enhancing durability and reducing permeability.
- To increase concrete slump retention.
- High reduction in water without loss of workability with flow concrete.
- Enhanced early and long-term strength development.
- Can be used for special type of concrete (C60-C70)MPA.
- Improves shrinkage and creep behavior and optimizes cement utilization.
- Enhances ultimate final strength while minimizing bleeding and segregation.
- Gives a smooth surface after leveling, self-leveling.
- High-density and impermeable concrete.

Area of Use:

- To hot weather condition, in term of the condition the material must be fully saturated and used water should be cooled by ice or chillier system.
- For concrete requiring long transport, maintaining workability and uniform performance.
- Produces concrete with high levels of workability without segregation.
- In slab and foundation, columns, architectural structures, and RCC concretes.
- Suitable for concrete elements with closely spaced or densely packed reinforcement.
- Enhances cohesion, enabling application in mass concrete pours and piling works.

Packing:

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

Standards:

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

Dosage:

The recommended dosage of HYPERPLUS R 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.

Method of Application: HYPERPLUS R 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.

Compatibility: HYPERPLUS R 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 R 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.

