



## HIGH RANGE WATER-REDUCER / NEW GENERATION SUPERPLASTICIZER PRECAST ADMIXTURE

**Description:**

HYPERPLUS PCT 2350 is a next-generation polycarboxylate based superplasticizer specifically engineered for self-compacting precast concrete (SCC). It enables high flowability without segregation, ensuring excellent filling ability, passing ability, and surface quality — even in heavily reinforced precast elements. Designed for high-performance industrial precast production.

**Technical Properties:**

<b>Chemical Content</b>	Polycarboxylate polymer
<b>Appearance</b>	Liquid
<b>Color</b>	Dark amber liquid
<b>pH</b>	4 –6
<b>Density (20 °C)</b>	1.05– 1.08g/cm <sup>3</sup>
<b>Chloride Content (%)</b>	< 0.1
<b>Alkaline Content (%)</b>	< 5
<b>Freezing</b>	-10 °C

**Advantage:**

- 30–40% water reduction.
- High flowability (SF2–SF3 class potential\*).
- Excellent passing ability.
- Reduced segregation and bleeding.
- Superior mold surface finish.
- Optimized viscosity balance.
- Stable performance under steam curing.
- No vibration required.
- Reduced labor cost.
- Superior architectural finish.
- Faster production cycles.
- Reduced honeycombing risk.
- Improved dimensional accuracy.
- Does not contain chloride or any other substances that may cause corrosion.

\*Depending on mix design.)

**Area of Use:**

- Architectural precast panels.
- Decorative and fair-faced concrete elements.
- Thin-section precast components.
- Heavily reinforced structural elements.
- Columns and beams with complex reinforcement layouts.
- Tunnel lining segments.
- High-performance structural precast units.
- Steam-cured precast production systems.
- Automated and high-speed precast manufacturing plants.
- Precast elements requiring superior surface finish.
- Concrete production where vibration is minimized or eliminated.

**Dosage:**

The recommended dosage of HYPERPLUS PCT 2350 is between 0.8 – 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 PCT 2350 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 PCT 2350: EN 934-2 Table 3.1-3.2  
ASTM C 494 Type F

**Compatibility:**

HYPERPLUS PCT 2350 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 PCT 2350 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.

