HIGH RANGE WATER-REDUCER / NEW GENERATION SUPERPLASTICIZER PRECAST ADMIXTURE

Description:

HYPERPLUS PCT 2340 is a next-generation dual-function admixture combining powerful water-reducing capability with accelerated setting and early strength development.Specially engineered for high-speed precast concrete production, it enables reduced water/cement ratio while simultaneously accelerating cement hydration reactions — resulting in faster demolding and higher early strength without compromising long-term durability.

Technical Properties:

Chemical Content	Polycarboxylate polymer
Appearance	Liquid
Color	Dark amber liquid
pH	4 –7
Density (20 °C)	1.09 – 1.15 g/cm³
Chloride Content (%)	< 0.1
Alkaline Content (%)	< 5
Freezing	-10 °C

Advantage:

- 20–35% water reduction.
- Accelerated initial and final setting time.
- High early compressive strength (6–12 hour demolding potential*).
- Dense microstructure formation.
- Reduced curing cycle time.
- Improved surface finish.
- Faster mold turnover.
- Reduced steam curing energy consumption.
- Increased daily production capacity.
- Does not contain chloride or any other substances that may cause corrosion.
  (*Performance depends on cement type and curing conditions.)

Area of Use:

- Precast concrete / prestressed concrete.
- Self-Compacting Concrete (SCC).
- High slump and flowable concretes.
- Low water/cement ratio concrete.
- High early strength concrete.
- Ready-mixed concrete.
- Mass concrete.
- In precast segment production in the tunnel sector.

Dosage:

The recommended dosage of HYPERPLUS PCT 2340 is between 0.7 – 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.

Packing:

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

Method of Application:

HYPERPLUS PCT 2340 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 2340: EN 934-2 Table 3.1-3.2
  ASTM C 494 Type E

Compatibility:

HYPERPLUS PCT 2340 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 2340 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.

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LEGAL NOTE : The information contained in this Technical Data Sheet is based on laboratory testing and practical experience. Actual performance may vary depending on substrate condition, application method, and environmental conditions. Users should test suitability before large-scale application.