



HIGH RANGE WATER-REDUCING/SUPERPLASTICIZING CONCRETE ADMIXTURE

Description:

PASS 350 / 350 S / 350 W admixture it is superplasticizer 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. PASS 350 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	4 - 6
Density (20 °C)	1.05 – 1.08 g/cm ³
Chloride Content (%)	< 0.1
Alkaline Content (%)	< 5
Freezing	-10 °C

Advantage:

- Low water-cement ratios & self-compacting concrete.
- To increase concrete slump retention.
- High reduction in water without loss of workability with flow concrete.
- Improved early and long-term strengths.
- Improves shrinkage and creep behavior and optimizes cement utilization.
- To increase final strength.
- Less bleeding and separation.
- Gives a smooth surface after leveling, self-leveling.
- High-density and impermeable concrete.
- Does not contain chloride or any other substances that may cause corrosion.

Area of Use:

- Application where long transporting is required.
- Produces concrete with high levels of workability without segregation.
- In slab and foundation, columns, architectural structures, and RCC concretes.
- To concrete elements with thin and dense reinforcements.
- Improve cohesion allows for use in mass concrete pours and piling.

Dosage:

The recommended dosage of PASS 350 / 350 S / 350 W is between 1.0 – 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.

Cleaning:

PASS 350 / 350 S / 350 W admixture can be washed with fresh cold water and should not be allowed enter sewers or open bodies of water.

Method of Application:

PASS 350 / 350 S / 350 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: PASS 350 W
- In summer months: PASS 350 S
- In transitional seasons: PASS 350

Standards:

- PASS 350: EN 934-2 Table 3.1-3.2
ASTM C 494 Type F
- PASS 350 S: EN 934-2 Table 11.1-11.2
ASTM C 494 Type G
- PASS 350 W: EN 934-2 Table 3.1-3.2
ASTM C 494 Type E

Compatibility:

PASS 350 / 350 S / 350 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:

- 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.



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.

