



## SURFACE SET RETARDER ADMIXTURE FOR EXPOSED CONCRETE

**Description:** SURFACE RETARDER SR7300 is a water-based surface retarding agent designed to delay the surface setting of freshly placed concrete. It enables controlled exposure of aggregates after washing, creating decorative and architectural finishes.

### Technical Properties:

<b>Chemical Content</b>	Organic retarding agent
<b>Appearance</b>	Liquid
<b>Color</b>	Light yellow
<b>pH</b>	7±1
<b>Density (20 °C)</b>	1.09 ± 0,02 g/cm <sup>3</sup>
<b>Chloride Content (%)</b>	< 0.1
<b>Alkaline Content (%)</b>	< 5
<b>Freezing</b>	-5 °C

### Advantage:

- Provides controlled extension of initial and final setting time.
- Improves workability retention in hot weather conditions.
- Reduces risk of cold joints during extended placing operations.
- Does not affect water demand of the concrete mix.
- Maintains designed water/cement ratio and strength performance.
- Compatible with polycarboxylate (PCE) and other high-range water-reducing admixtures.
- Allows independent adjustment of setting time without influencing slump or strength development.
- Suitable for mass concrete applications by moderating heat evolution.
- Chloride-free and safe for reinforced concrete.

### Area of Use:

- Exposed aggregate concrete surfaces.
- Architectural concrete finishes.
- Precast panels.
- Decorative pavements.
- Washed concrete surfaces.
- Concrete facades.

### Dosage:

Approx. 0.15 – 0.30 L/m<sup>2</sup>, depending on required depth of aggregate exposure and surface conditions. When required, the Polystar Co. Technical Support Unit should be consulted.

### Packing:

- 30 kg plastic drum
- 250 kg drum
- 1000 kg container

### Cleaning:

SET RETARDER SR7300 admixture can be washed with fresh cold water and should not be allowed enter sewers or open bodies of water

**Method of Application:** SURFACE RETARDER SR7300 can be applied by a brush, roller or spray equipment. Must be used with clean formwork. Can be diluted with clean water at a ratio 1:1 to 1:3 depending on the impact. If the product will be applied to concrete surface, it should be applied right after the end of initial bleeding of the concrete and before initial set.

Consumption (L/m <sup>2</sup> )	Wash Time (20-25 °C)	Expected Exposure Depth
0.15 - 0.18	12-16 hours	Light (1 - 2 mm)
0.18 - 0.22	14-20 hours	Medium (2 - 4 mm)
0.22 - 0.30	16-24 hours	Heavy (4 - 8 mm)

The final exposure depth depends on cement type, concrete mix design, ambient temperature, and washing pressure. Trial applications are recommended before large-scale use.

### Precautions in Application:

- Apply only after final finishing of the concrete surface.
- Do not apply on bleeding water; wait until surface water has evaporated.
- Ensure uniform spray application to avoid patchy aggregate exposure.
- Avoid over-application, as it may cause excessive depth of exposure.
- Do not dilute unless specifically recommended.
- Protect the treated surface from rain, strong wind, and direct sunlight.
- Application and curing time may vary depending on temperature, cement type, and humidity.
- Perform a trial application to determine optimal washing time and exposure depth.
- Wash the surface carefully using low to moderate pressure water jet to prevent aggregate loosening.
- Do not use high-pressure washing that may damage the concrete surface.
- Clean spray equipment immediately after use with water.
- Do not apply at temperatures below +5°C or above +35°C without prior testing.
- Ensure proper surface protection if delayed washing is expected.



**Storage and Shelf Life:** Must be stored at temperatures between +5°C and +45°C. Under proper storing conditions, the product's shelf life is 24 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.

