

TOP-CAST® Data Sheet

Top-Surface Retarder

Product Description

TOP-CAST is a water-based, top-surface retarder which does not require covering with plastic for protection. It is available in 12 depths of etch, each one color and number coded for safety and convenience.

Product Advantages

- Comprehensive range of etch depths
- Excellent depth of etch control
- Color coded products
- Heavily pigmented for ease of application
- Excellent coverage rates
- Solvent free, odorless
- Heat resistance up to 150°F (65°C)

Product Uses

Ideal for poured-in-place flatwork and the top surface of precast panels. The wide selection of grades available provides a comprehensive range of effects, from a simulated light acid wash or sand blast finish up to full exposure of 1 1/4 in. (32 mm) aggregate.

Performance

Each product grade creates a unique degree of reaction to produce the desired effect on the surface mortar. The retarding chemicals diffuse into the paste during the first hours of curing and slow down the cement hydration reaction. During the next 16+ hours of curing the bulk concrete hardens, except where the cement matrix has been retarded. The retarded surface can then be removed by water or pressurized water, revealing the aggregate in the concrete mix.

Application Information

Always prepare small test panels to determine the most suitable grade to obtain the desired depth of etch. When pouring test samples, always simulate job site conditions as well as mix designs to be used on the project to establish the proper grade selection and procedures.

Application

In preparation for pouring of concrete, protect all curbs, borders, adjacent stones, pavers, etc. with a coat of TOP-CAST®SS-100 surface protectant. Allow coating to dry before pouring concrete. Pour concrete and float or trowel finish. Alternatively, screed away excess water, and hand seed extra stone into top surface, if desired. Finish with a Darby trowel to keep concrete pores open for surface retarder application.

Mix TOP-CAST thoroughly before application. Apply TOP-CAST® surface retarder uniformly to the wet concrete after the initial bleed water rises to the surface. Spray with a low-pressure sprayer (plastic preferred) until the surface has a complete hiding coat. Do not apply too sparingly. Use water for clean up. Once dry (1-2 hours after application), TOP-CAST® provides good protection against intermittent rain and does not require additional cover.

Removal

Wash off with high-pressure water. Actual removal time for the desired appearance varies based upon concrete mix design, finishing technique, weather conditions and grade of TOP-CAST used. The retarded cement matrix can be removed as early as 4 hours and up to 16 hours depending on conditions. Complete your project with one of the products from the TOP-CAST® decorative finish system.



Coverage Rates

TOP-CAST surface retarder will cover approximately 200-300 ft /gal (4.9-7.4 m /L).

TOP-CAST® Grade Guide

EST. ETCH-DEPTH*	GRADE
Light Acid Wash	01 White
Acid Etch	03 Light Violet
Sand Blast	05 Powder Blue Violet
Up to 1/4 in. (Up to 6.5 mm)	15 Yellow
1/8 to 1/4 in. (3.0 to 6.5 mm)	25 Beige
1/8 to 3/8 in. (3.0 to 9.5 mm)	50 Canary Green
1/8 to 3/8 in. (3.0 to 9.5 mm)	75 Blue
3/8 to 1/2 in. (9.5 to 13 mm)	100 Gray

3/8 to 5/8 in. (13 to 16 mm)	125 Pink
3/8 to 5/8 in. (13 to 16 mm)	150 Green
5/8 to 1 in. (16 to 25 mm)	200 Salmon
1 to 1½ in. (25 to 38 mm)	250 Orange

*564 lbs/yd³ or 355 kg/m³ of cement.

Packaging & Handling

TOP-CAST[®] surface retarder is available in 5 gal (19 L) plastic containers.

Storage

TOP-CAST[®] surface retarder has a shelf life of two years from date of manufacture in closed original containers.

Store out of direct sunlight and between 50 °F and 90 °F. Do not allow to freeze.

All precautions defined on the [® %2001_%28USGHS%29_0.pdf">SDS \(Safety Data Sheet\)](#) for TOP-CAST[®] must be followed.

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