TECHNICAL DATA



CITADEL[®] CONCRETE STAIN

DESCRIPTION AND USES

Citadel[®] Concrete Stain is a chemically reactive, product that creates beautiful, durable colored concrete. For application on overlays, profiled concrete, and exterior concrete, this high-solids treatment utilizes lithium densifier and a proprietary ultra-performance binder to anchor color to the concrete. It hardens and protects both interior and exterior slabs and provides stunning, long-lasting color that will not peel or flake.

Concrete Stain is an ideal solution for all construction phases and maintenance projects that require superior and enduring color, as well as protection against UV radiation, water intrusion, aggressive chemicals, abrasion, and corrosion. This breathable stain comes in a variety of colors. Concrete Stain is low in VOC's, environmentally friendly and has a very low polymer odor.

PRODUCT FEATURES AND BENEFITS

- Dust-proof and resistant to staining and deterioration
- All-in-one sealer and color
- UV Stable
- Will not peel, flake, blister or delaminate
- Dries quickly with low odor
- VOC compliant

PRODUCTS

DESCRIPTION	1-Gal.	5-Gal.
Concrete Stain Natural Gray	374799	374800
Concrete Stain Sky Gray	374801	374802
Concrete Stain Chocolate	374803	374804
Concrete Stain Umber	374805	374806
Concrete Stain Sand	374890	374891
COMPANION CLEANERS		

DESCRIPTION	SKU
Clean and Defend 1 Gallon	370984
Clean and Defend 5 Gallon Pail	370997

PRODUCT APPLICATION

READ ALL INSTRUCTIONS CAREFULLY BEFORE STARTING PROJECT

APPLICATION EQUIPMENT

200-grit metal bond diamond grinding tools, autoscrubber, microfiber pad, low-pressure sprayer with conical tip, soft broom, masking tape, masking paper and/or plastic sheet.

NOTE: To achieve consistent application, practice applying product on a test concrete slab before using on a jobsite. Apply only when temperatures will be above 40° F (4°C) for at least 2 hours following application. Allow a minimum 7–14 days cure time for new concrete prior to preparation and application.

PRODUCT APPLICATION (cont.)

SURFACE PREPARATION: INTERIOR/SMOOTH/TROWLED CONCRETE

Preparation and cleanliness of concrete are essential for successful stain application. To create a smooth but porous surface, it is ideal to wet grind with 200-220 grit metal diamonds. (Do not use resin-bond or hybrid-resin diamonds.) This step opens the pores of the substrate and allows better penetration and adhesion.

(Extremely rough or damaged floors may need coarser grinding before 200-grit profiling.)

Clean surface with autoscrubber, wipe with microfiber pad, and perform a white-rag wiping test to ensure all dirt and dust has been removed. Do not use citrus or acidic cleaners. If acidic or d-limonene cleaners have been used, neutralize the surface using an alkaline.

Mask areas that do not receive Concrete Stain to protect from overspray.

SURFACE PREPARATION: EXTERIOR/ROUGH SURFACE

Clean surface with autoscrubber. Surface should be clean of dust and debris and completely dry.

Mask areas that do not receive Concrete Stain to protect from overspray.

MIXING

Mix product thoroughly with a mechanical mixer to ensure color uniformity.

APPLICATION: INTERIOR/SMOOTH/TROWLED CONCRETE

Apply using a low-pressure, pump-up, airless, or mechanical sprayer with a conical tip (very fine mist - do not use a fan tip). Apply material evenly at approximately 600-700 ft² per gallon. Do not over apply the product. Use a circular motion and maintain a consistent, even spray. Let product sit until it starts to dry in some areas. Using a very soft bristle broom, lightly broom out any pooled material.

Allow material to dry for 30 minutes minimum (until completely dry to the touch), then apply a second application of Concrete Stain, repeating the steps above. Additional applications may be added until desired depth of color has been achieved. Allow each application to dry completely before the next application.

Once stain is dry (approximately one hour), apply two very thin coats of Citadel Stain Guard using a microfiber applicator pad. Let dry between coats. The surface is ready for use when dry.

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PRODUCT APPLICATION (cont.)

APPLICATION: EXTERIOR/ROUGH SURFACE

Mix product thoroughly with a mechanical mixer to ensure color uniformity. The application for exterior concrete is the same as interior except coverage rate will be closer to 300-400 ft² per gallon.

Once stain is dry (approximately one hour), apply two very thin coats of Citadel Stain Guard using a microfiber applicator pad. Let dry between coats. The surface is ready for use when dry.

CLEAN-UP

Use soap and water to clean tools and equipment. Although Concrete Stain is nontoxic and environmentally safe, it is alkaline. Use up or dry out extra material and dispose of according to local regulations. Do not pour into sewer systems or storm drains.

MAINTENANCE

Routine sweeping, mopping, and washing of floors with water and Citadel Clean and Defend or neutral pH cleaners is recommended. Plain water is sufficient for most environments. DO NOT USE cleaners that are acidic or that have citrus (d-Limonene) or Butyl compounds.

MAINTENANCE (Commercial)

Routine sweeping, mopping, washing and mechanical scrubbing of floors with water and Citadel Clean and Defend or neutral pH cleaners is recommended to maintain the appearance and protection of the finish. When using a mechanical scrubber, add 4 oz. of the cleaner per 15 gallon water tank. We recommend using red or white pads on the machine. DO NOT USE cleaners that are acidic or that have citrus (d-Limonene) or Butyl compounds.

When possible, burnish interior floors with a 1500 grit diamond pad once a week, immediately after cleaning. This will keep the floor's finish smooth, glossy and clean. Reapply Citadel Stain Guard once every year and more frequently in high traffic areas to rejuvenate appearance and help prevent stains, spills and the wearing of color beneath.

PRODUCT APPLICATION (cont.)

LIMITATIONS

Concrete Stain is chemically resistant and helps reduce staining, but some compounds, especially acids, may damage the surface.

Concrete Stain will not bridge or fill cracks and will not salvage honeycombed or structurally unsound surfaces. This product will not alter the profile of a surface. Not suitable for asphalt, non-cementitious surfaces or painted surfaces.

If Concrete Stain comes into contact with glass, fabric, metal, or painted surfaces, immediately wipe contaminated surfaces with a damp cloth, then wipe dry with a second clean cloth.

TECHNICAL DATA

CDL-27



CITADEL[®] CONCRETE STAIN

PHYSICAL PROPERTIES

	CONCRETE STAIN	
Resin Type	Lithium Polysilicate	
Solids By Volume	17%	
рН	11-12	
Color	Varies	
Odor	Slight polymer-like odor	
Volatile Organic Compounds	<50 g/l	
Practical Coverage	Machine-troweled concrete: 600-700 sq. ft. per gallon (15-17 m ² per liter) Broom-finished concrete: 300-400 sq. ft. per gallon (8-13 m ² per liter) Coverage rate will vary with porosity and environmental conditions	
Shelf Life	6 months (unopened, sealed container)	
Flash Point	NA	
CAUTION!	Protect from freezing	
Safety Information	See SDS	

Calculated values are shown and may vary slightly from the actual manufactured material.

The technical data and suggestions for use contained herein are correct to the best of our knowledge, and offered in good faith. The statements of this literature do not constitute a warranty, express, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.



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