



Water Base Concrete Stain

Technical Data Sheet

Product description

: A semi-transparent, decorative stain formulated for use on concrete and masonry surfaces. The stain provides durable color while offering resistance to water submersion, alkali, weathering, and UV exposure. Floor Stains require the application of a compatible sealer or topcoat. The stains are suitable for use beneath both solvent-based and water-based, single- and two-component coating systems, including, but not limited to, acrylic, polyurethane, polyaspartic, and epoxy-based sealers and topcoats.

Advantages

: Low-odor formulation
Fast air-drying
Low VOC formulation

Uses

: Suitable for interior and exterior applications.
For application over properly prepared:
Concrete and masonry surfaces, including, but not limited to:
Polymer-modified overlays
Concrete pavers
Brick
Stucco
Previously sealed surfaces that are sound, properly prepared, and firmly bonded.
Neutralized acid-stained surfaces.

Cure Time

Pot Life	3 months after mixing
Tack Free	15-20 min
Rain Exposer (light)	60-90 min
Foot Traffic	60 min
Sealing/Topcoat	Waterborne: usually < 60 min Solvent: 24 hours
Heavy Traffic	Dependent on sealer/topcoat
Water Submersible	24 hours

Application Data

Coverage	1qt- 250sq ft- 450 sq ft
Surface Temp.	Max 110° @ 80% Humidity Min 45° @ 0% Humidity

Technical Properties

Abrasion Resistance	ASTM D4060	Dependent on sealer/topcoat
Gloss	ASTM D1455	Dependent on sealer/topcoat
VOC	ASTM D3960	Dependent on color
Flash point	ASTM D3278	212° F

Surface Preparation: The surface must be clean, sound, and free of any foreign materials that may interfere with product absorption or adhesion. Contaminants include, but are not limited to, grease, oil, dirt, dust, adhesives, existing coatings, curing compounds, sealers, and other surface contaminants.

*Do NOT Acid Etch as a cleaning method.

Mixing: The product is supplied as a concentrate and must be diluted prior to application. For base colors applied to concrete, the recommended dilution ratio is:

1 part concentrate : 2 parts base additive : 2 parts distilled, deionized, or reverse-osmosis water.

Use only clean, distilled, deionized, or reverse-osmosis water for dilution. Mix thoroughly to ensure a uniform solution prior to application.

Application: For a natural, variegated appearance, apply the stain as a fine mist using an airless sprayer, HVLP sprayer, production spray gun, pump sprayer, or trigger spray bottle. Color variation is influenced by pigment characteristics and the absorption rate of the substrate.

Spray Application:

For airless spray application, use a 0.013-inch orifice spray tip, such as a 5-13 tip, to produce an approximate 10-12 inch fan pattern.

Brush / Sea Sponge Application:

For areas requiring greater coverage and application control, such as corners, edges, and along walls, apply using a sea sponge or traditional bristle brush. Brush or sponge application may produce visible mechanical lines or variations in the finish.

Roller Application:

Roller application is not recommended when a natural, variegated appearance is desired, as the mechanical action of the roller may force product into the substrate and create visible lines or patterns.

Secondary / Highlight Color:

To increase color depth or create a more pronounced mottled appearance, a secondary or highlight color may be applied once the initial color has dried to the touch, typically approximately 15 minutes. Colors may be mixed, applied simultaneously, or layered to achieve the desired appearance.

Previously Sealed Surfaces:

After thoroughly cleaning the previously sealed surface, apply the product by airless or HVLP sprayer to a small, inconspicuous test area. Allow the test application to dry for approximately 15-20 minutes, then evaluate adhesion by rubbing the surface with your hand.

If the coating does not rub off or transfer, adhesion is considered acceptable and application may proceed to the remaining surface. Allow the stained surface to dry for a minimum of 24 hours before applying a compatible clear sealer or topcoat.

Clean-up/Storage: Between 40°F (4.4°C) to 110°F (43.3°C)

Unopened: 2 years when stored in the original, unopened container.

Opened, Undiluted: Use within 12 months of opening.

Diluted: Use within 3 months of dilution.

Clean the work area, tools, and equipment immediately with water while the stain is still wet.

Acetone may be used to remove recently applied stain that has dried on spray tips or unintended surfaces. Before using acetone, test the affected surface in an inconspicuous area to verify that the solvent will not cause damage or adversely affect the substrate or existing coating.

Limitations: Polished Concrete: Not recommended for application over polished concrete surfaces.

Non-Porous Substrates: Not recommended for use on non-porous substrates, including metal, resin, or fiberglass, when subjected to continuous water immersion or severe weather conditions.

Water Quality: Hard water may adversely affect product performance and appearance. For optimal results, use distilled, deionized, or reverse-osmosis water when diluting or mixing the product.

Surface Temperature: Avoid application to excessively hot surfaces. If the surface is uncomfortable to the touch after approximately 30 seconds of contact with bare skin, it may be too hot for application. Application to hot surfaces can cause the product to flash-cure, particularly in direct sunlight.

Direct sunlight can significantly increase concrete surface temperatures. Concrete exposed to direct sunlight may reach temperatures approximately 20-30°F (11-17°C) above the ambient air temperature. For example, when the air temperature is 95°F (35°C), a sun-exposed concrete surface may reach 125°F (51.7°C) or higher.

Surface Preparation: Proper surface preparation is required for both newly cured and existing concrete. New concrete must be adequately cured prior to application.

Traffic-Bearing Surfaces: Surfaces subject to foot or vehicular traffic must be protected with a compatible sealer or topcoat suitable for the intended service conditions.

Acid Preparation: DO NOT USE MURIATIC (HYDROCHLORIC) ACID to prepare concrete prior to application. Chloride contamination may occur and can be particularly problematic with Type 1L concrete.

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