

Miracote Mirastain

Product Technical Data Sheet

Mirastain is a concentrated, water-based, co-polymer penetrating architectural stain for use on cementitious microtoppings, overlays, conventional concrete and other porous masonry surfaces. Formulated to be friendly with our environment and LEED-compliant, *Mirastain* penetrates and bonds within the pore structure of cementitious or masonry surfaces to achieve vibrant long-lasting transparent colors in a flat finish with excellent resistance to UV

exposure and degradation. For unique and distinctive looks, *Mirastain* concentrate is diluted on site with an appropriate solvent and pigmented with ColorPax LIP dispersion packs. Mixed stain is then ready to be applied in a single color or in multiple colors applied in different layers.

Unlike acid and many other types of concrete stains, *Mirastain* has been designed to leave no residue that requires clean up or neutralization prior to the application of a finish coat or sealer. As soon as the applied stain has dried, usually within 30 minutes, it can be sealed with any one of several clear Miracote sealers and topcoats. Depending on specific service and exposure conditions, a wide variety of clear sealers and topcoats are available including MiraGard single component, vapor permeable, solvent and water-based acrylics, MiraFlor two-component resinous epoxy, polyaspartic and polyurea topcoats, and MiraThane single and two-component polyurethanes.

WHERE TO USE

- Stain and refurbish new and existing concrete
- Horizontal, vertical and overhead surfaces
- For accenting Miracote MPC-MT and MiraStamp
- Enhancement of parking decks, columns, walls
- Restore the appearance of stamped concrete
- Pool decks and patios
- Decorative floor finishes and micro-toppings
- Concrete pavers, masonry, split face and fluted block
- Tilt-up concrete and precast concrete

ADVANTAGES

- Penetrating stain technology no surface film that can peel
- "Can't Go Wrong" application make changes or start over
- Easy clean up with just water and soap.
- Versatility of application spray, roller, sponge, brush
- UV stable Miracote standard and custom colors
- Suitable for most porous surfaces both interior and exterior
- No rinsing or neutralization needed for sealer application
- Rapid drying can be sealed within 30 minutes
- Excellent flexibility to adjust dilution and pigmentation
- LEED Credit Points available in 5 different classifications

COVERAGE RATES

250 - 800 sq. ft. per gallon, depending on application technique, desired antiquing effect, or substrate type.

Actual consumption rates are dependent on many factors including, but not limited to, substrate texture and porosity, multi-layered applications and normal allowance for waste.

PACKAGING and COLORS

1-gallon cans, 5-gallon pails* - re-closable lids ColorPax-LIP and ColorPax-W single pigment pack unit **Mirastain* containers are short-filled to allow for the dilution with urethane grade solvent, typically isopropyl alcohol or acetone.

MIX RATIO

Add solvent to *Mirastain*: 1/3 gallon of solvent to 1 gallon can or 2 gallons of solvent to a 5-gallon pail

Add ColorPax-LIP up to 8% maximum by volume to Mirastain Add ColorPax-W up to 4% maximum by volume to Mirastain

SHELF LIFE AND STORAGE

One year from the date of manufacture when unopened and material is stored in a protected environment free from moisture, excessive heat, freezing temperatures, and direct sunlight.

TYPICAL PHYSICAL PROPERTIES @ 75°F (24°C) @ 50% R.H.

Vehicle Type	Acrylic polymer emulsion
Pigment Class	UV stable pigment dispersion
Polymer	Promotes adhesion to concrete surface
Sheen	Matte
Drying time	
Flash Point	>220°F

OVERVIEW OF INSTALLATION STEPS

- Surface Preparation All surfaces to be stained must be clean, sound and free from any bond inhibiting substances including, but not limited to, curing compounds, sealers, grease, oil and any other contaminants or loosely adhered materials that may interfere with stain penetration. For concrete substrates, an open pore structure and minimum surface profile of CSP-1 is required depending on overall substrate conditions and staining requirements. Concrete and other porous or absorptive substrates can be slightly damp or dry, depending on desired color accent or effect, at the time of application to the substrate.
- **Mixing** All materials must be mixed mechanically using a high-speed drill with a "Jiffy-type" or similar paddle mixer. Available in one and five gallon short-filled containers, *Mirastain* is diluted in the field with only urethane grade isopropyl alcohol or acetone to achieve the correct volume of ready-to-use stain. 1-gallon units contain 2/3 gallon of concentrate to which 1/3 gallon of solvent is added. 5-gallon units are short-filled with three gallons and require dilution with two gallons of solvent. Begin mixing the *Mirastain* base with a high-speed drill. Then slowly add solvent into the vortex and continue mixing for one minute. For pigmentation, add appropriate Miracote ColorPax LIP or ColorPax W and mix thoroughly.
- Application Mixed and pigmented stain can be applied using a trowel, roller, brush, broom, sponge, or spray equipment. The use of an HVLP (high pressure-low volume) sprayer offers excellent control and outstanding results when accenting the application with highlights and variegations. Multiple layers of *Mirastain* combinations applied in tandem create infinite styles of color variegations and effects. *Mirastain* can also be diluted with water for lighter intensity. There is no need to rinse or neutralize the surface after treatment with *Mirastain*. Once dry, 30 to 60 minutes under normal conditions, immediately apply a clear Miracote floor sealer or topcoat to assure durability and longevity. If a sealer cannot be applied right away, protect the application from traffic and contamination until a protective sealer can be applied.



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FOR BEST RESULTS

- Always install a minimum 4' by 4' test area or mock up to obtain owner approval of acceptable color, texture, finish adhesion and any other critical requirements prior to proceeding.
- Verify that the most current versions of product technical data sheets (PTDS), color charts, safety data sheets (SDS), and installation guidelines (IG) are being utilized for project submittals and application reference.
- Protect materials from excessive heat and cold.
- The proper application of this product is the sole responsibility of the end user. Job site visits by Miracote representatives are only for observation and making recommendations. Supervision and quality control are the sole responsibility of the user.
- Measure substrate temperatures to ensure that material is applied only when temperatures are between 50°F (4.5°C) and 90°F (32.2°C) during placement of the Mirastain.

LIMITATIONS

- As with all colored stains, results may vary over natural porous mineral substrates.
- *Mirastain* must be protected with a clear sealer or topcoat to maintain a vibrant color, longevity, durability, chemical and abrasion resistance, and ensure ease of cleaning.
- Substrates to be stained must be sufficiently cured, and clean with an open pore structure for penetration. New concrete should be allowed to cure approximately 10 to 14 days.

LIMITED WARRANTY

NO WARRANTY SHALL BE EFFECTIVE UNTIL THE TERMS AND CONDITIONS OF SALE SET FORTH IN CROSSFIELD PRODUCTS CORP. INVOICES ARE MET.

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CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



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