



Manufactured Specifically for
Licensed RetroPlate® Applicators



RetroPlate Concrete Dye

Technical Data Sheet

Description

RetroPlate Concrete Dye Concentrates are a combination of specialty formulated dye/metal complexes concentrated in a water-based, LOW VOC solution that can be diluted in water, alcohol or acetone. RetroPlate Concrete Dye is a concentrated solution, not a dispersion, ready for immediate use without any dwell or reaction time like dye powder concentrates. When applied to bare concrete, polished concrete or overlays, RetroPlate Concrete Dye will provide intense, translucent color effects, similar to stains, without creating a film or coating that can be worn away. RetroPlate Concrete Dye is available in 13 standard colors.

Product Benefits

- **RetroPlate Concrete Dye is for use in interior applications only.**
- RetroPlate Concrete Dye deeply penetrates and resides in the microscopic voids and substrate structure of properly prepared concrete and overlay surfaces.
- RetroPlate Concrete Dye is a viable alternative to traditional reactive stains, when a larger color palette or ease of installation is required. RetroPlate Concrete Dye is also ideal for polished concrete due to its depth of penetration.
- RetroPlate Concrete Dye can be utilized as a coloration tool in the production of concrete flooring and pre-cast elements provided that the installation will not be subject to UV Light exposure.
- RetroPlate Concrete Dye is manufactured as a VOC compliant liquid concentrate. It is designed to be diluted with a non aromatic or aliphatic solvent like water, acetone, or isopropyl alcohol - or a combination of those to create a customized marbling effect.

Application

1. Dilute 3.5 oz. with 1 quart of diluents, 15 oz. with 1 gal. of diluents or 75 oz. with 5 gal. of diluents (Diluents: water, alcohol or acetone*).
2. Always complete a jobsite sample to confirm color.
3. RetroPlate Concrete Dye Concentrates are best applied with an HVLP sprayer, airless sprayer or good quality solvent-resistant pump-up sprayer.
4. Protect all adjacent surfaces from overspray, as RetroPlate Concrete Dye will discolor any porous substrates.
5. Apply first dye application after the 400-grit level of polishing. Multiple light applications are always recommended instead of one, heavy application.
6. Wait approximately 30 to 45 minutes after dye has visibly dried before dry wiping the floor with a white cloth or cleaning the floor with water and CreteClean Plus with Scar Guard™. Doing so confirms the dye is locked into the concrete and removes any excess residue. Diluting with water may lengthen the waiting period.
7. Apply RetroPlate® per manufacturer's guidelines.
8. If additional color is required, apply a second, light application of dye, once again waiting 30 – 45 minutes before proceeding. In some cases, the applicator may wish to use a light application of dye subsequent to the 800 or higher grit level for maximum color intensity.
9. Application of RetroPel™ or RetroGuard™ is recommended, especially in areas that may be in contact with oil, food or water. Always test RetroPel or RetroGuard on the dyed concrete prior to application to assure compatibility.
10. Once the dye and polish portion of the project is complete, protect the floor with breathable protection products if needed.

Shelf Life and Storage

RetroPlate Concrete Dye has a shelf life of one year. Store product indoors, away from heat or direct sunlight. Do not allow product to freeze.

Coverage Rate and Drying Times

Coverage rates may vary greatly depending on substrate porosity, substrate color and dilution utilized to achieve desired final appearance.

- 500 ft² = 15 oz. concentrate / 1 gal. diluents | 12.25 m² = 117 cc concentrate / 1 L diluents (Diluents: water, alcohol or acetone)

Drying times can be dramatically affected by temperature and humidity if diluted with water rather than acetone. Temperature and humidity will dramatically affect the drying times of RetroPlate Concrete Dye if diluted with water rather than acetone.

- Application must be made to concrete with a temperature higher than 50°F and maintained at this temperature or above for a minimum of 4 hours after application.
- Typical dry time is 30 seconds to 30 minutes at 70°F and 50% relative humidity.
- Dry times are also dependent upon the water or solvent carrier ratios.

Package Sizes

RetroPlate Concrete Dye is available in 3.5 oz., 15 oz. and 75 oz. packaging sizes.

Applicable Standards

LEED Qualified when diluted with water or alcohol.

Technical Data

Please refer to the corresponding MSDS for hazard-related information.

Physical Properties: Water-Based Formulations

Physical	Liquid
Odor	Little to none
Solids after application	100%
UV Stability	5-10%+ fading to be expected if exposed

Product Handling

***NOTE: When diluting RetroPlate Concrete Dye with acetone, be aware that the fumes are extremely flammable. Assure that all pilot lights and ignition sources are extinguished. Provide proper ventilation, as well as respiratory and safety equipment. Consult the acetone manufacturers' MSDS for additional safety and handling information. Use caution when spraying in any enclosed space.**

For complete instructions on handling and use, consult the corresponding Material Safety Data Sheet before using product.

Warranty

RetroPlate Concrete Dye, a proprietary product, is warranted to be of uniform quality within manufacturing tolerances. Since control is not exercised over its use, no warranty, expressed or implied, is made as to the effects of such use. Seller's and manufacturer's obligation under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective. The user assumes all other risks and liabilities resulting from use of this product. If you have any questions, please contact ChemSystems, Inc.

