

FLOR-COLOR[™]

Micronized High Performance Waterborne Dye

Technical Information Sheet

Product Description

FLOR-COLOR[™] is a waterborne translucent dye designed for use in the Diamatic **ULTRAFLOOR[®]** Polished Concrete System. When applied to overlays, profiled or a polished concrete surface it will provide a variegated coloring effect without creating a film or coating that can be worn away. **FLOR-COLOR[™]** is a low VOC emitting stain and is safe to use on any project.

Product Details

DIAMATIC FLOR-COLOR is for use in interior applications only. **DIAMATIC FLOR-COLOR** deeply penetrates and resides in the microscopic voids and substrate structure of properly prepared concrete and overlay surfaces. **FLOR-COLOR** is a viable alternative to reactive stains, or acetone based dyes. **FLOR-COLOR** is also ideal for polished concrete due to its depth of penetration. It is also safe to use in enclosed areas as it emits no hazardous or offensive fumes. **FLOR-COLOR** is manufactured as a pre-induced concentrate that is diluted with water. The material can be further diluted to create a large spectrum of colors.

Coverage Rate

After mixing with the appropriate amount of water **FLOR-COLOR** will cover approximately **400-500** square feet per gallon. A sample or test area should always be done before the application to ensure that proper amount is being used.

Limitations

DIAMATIC FLOR-COLOR is designed for interior use only and should not be used in applications that will be subjected to direct UV Light exposure. The material should be applied with temperatures between 40 °F and 90 °F. Applications below 50 °F will significantly increase the drying times of the product. High humidity can also slow the products drying time. The substrate should be completely clean and free of any debris, dust or contaminants that can prevent the product from properly penetrating into the surface. Do not allow the product to freeze during storage; if the product has been frozen it should not be used.

Drying Times

The drying times for **DIAMATIC FLOR-COLOR** will vary based on the substrate temperature and porosity. Typically the material will dry completely in 30-45 minutes. If low temperatures or high humidity are present the drying times will be affected significantly. Temperatures below 50 °F could increase the drying time up to 2 hours or longer. Do not over apply the product as it will increase the drying time and produce color rings around any puddles. Allow 30-45 minutes between coats if required.

Packaging and Shelf Life

The material is available in 1 gallon and 5 gallon kits. Sample kits are also available. The product has a shelf life of 1 year. The product should be stored indoors, away from heat or direct sunlight. Do not allow the material to freeze.

Surface Preparation

The surface of the concrete should be properly processed through diamond grinding before receiving the application. In standard installations the surface should be ground to the 400 grit level. On surfaces not receiving a ground and polished finish the surface should be profiled to a CSP 1-2 in accordance with **ICRI-03732** technical guidelines.

Mixing

The **DIAMATIC FLOR-COLOR** concentrate should be mixed using clean potable or distilled water in the amount applicable to the container size. The 1 gallon kit should be mixed with 1 gallon of water; the 5 gallon kit should be mixed with 5 gallons of water. Mix completely by hand using a stir stick. Power mixing is not required. After the material has been mixed it may be used immediately.

Equipment

Typical application equipment may include; an airless sprayer, a quality pump type sprayer equipped with a conical tip, an HVLP (high volume low pressure) sprayer, or a hybrid spraying system designed for use with dyes and colorants. For substrates that will not easily accept the dye it may be massaged into the substrate using a clean pre-treated micro-fiber applicator.

Jobsite Sample

A representative job site sample or mock-up panel should always be done prior to any application to insure that the color developed is acceptable. This should always be done over the same substrate as the actual job will require. If applying to an overlay a different color will be produced over the white as opposed to a gray. The variance in color and texture of a concrete surface will also have an affect on the final appearance.



LithoDYE[®]

Technical Information Sheet (cont)

Application - polished concrete

For polished concrete applications the surface must be properly profiled in order to accept the DIAMATIC **FLOR-COLOR** application. When installing an ULTRAFLOOR® the surface should be ground using the following sequence; 60/80 metal bonded diamonds, #1 transitional ceramic diamonds, 200 grit resin bonded diamond, and 400 grit resin bonded diamonds. (50 and 100 grit resin bonded diamond passes may be used in lieu of the #1 ceramic). The edges should be ground to match the rest of the floor before the application. The surface should be thoroughly cleaned before the application, this may include a broom, vacuum, and wet scrub to remove any dust or contaminants from the surface. The surface should be allowed to dry completely before the application. A moist or saturated surface will reduce penetration and affect the application and drying time. Be sure to mask any adjacent areas not intended to be dyed. Protect any walls or other finished surfaces.

After mixing the DIAMATIC **FLOR-COLOR** the material should be placed into the spraying system to be used. (refer to equipment section) Begin the application by spraying evenly over the surface in circular motions at the rate 400-500 square feet per gallon. Do not allow the material to puddle as rings may form on the edges. Once the surface has reached the saturation point it will accept no more material, this is point when the material will begin to puddle. Continue the application until the entire surface has been treated. Use of a pre-treated micro-fiber applicator may be used to massage the material into the surface after spraying, but it is not recommended as some streaking may occur. When using the micro-fiber applicator be sure to continue rubbing the surface until no streaks are visible. Allow the surface to dry completely before continuing to the next step, typical drying time will be 30-45 minutes at 70 °F, in cooler temperatures the surface may require additional drying time. A second coat may be applied after the material is completely dry and can be walked on without leaving a footprint. For two coat applications it is recommended to wear a shoe cover. In typical applications one coat should suffice.

After the surface has dried completely the surface may be treated with the DIAMATIC **FLOR-SIL** Lithium Densifier. Apply the densifier according to the application instructions. Allow the densifier to dry completely before continuing to the next step. Continue polishing using an 800 grit resin bonded diamond. Further polishing may continue based on the required finish. Diamonds should always be run a minimum of one pass after the dye application has been completed to remove any residual material that did not penetrate the surface during the application. Micro-Polishing with the DIAMATIC **FLOR-GRIT** pads are suggested before applying the DIAMATIC **FLOR-FINISH**. Apply the **FLOR-FINISH** according to the application instructions to protect and preserve the finished floor.

Application - polished overlay

DIAMATIC **FLOR-COLOR** application on a polymer overlay is done following the same process as previously listed with the exception of wet cleaning. Some overlay material should never be wetted during the polishing installation. Check with your overlay manufacturer for complete system details and limitations.

The overlay material should be prepared in the same manner as a concrete application to ensure the material will accept the color. After mixing the DIAMATIC **FLOR-COLOR** the material should be placed into the spraying system to be used. (refer to equipment section) Begin the application by spraying evenly over the surface in circular motions at the rate 400-500 square feet per gallon. The coverage rate for an overlay application will remain the same.

After the surface has dried completely the surface may be treated with the DIAMATIC **FLOR-HARD** Lithium Densifier. The **FLOR-HARD** Lithium Densifier has been formulated specifically for use on polymer based overlay materials. Apply the densifier according to the application instructions. Allow the densifier to dry completely before continuing to the next step.

Continue polishing using an 800 grit resin bonded diamond. Further polishing may continue based on the required finish. Diamonds should always be run a minimum of one pass after the dye application has been completed to remove any residual material that did not penetrate the surface during the application.

Micro-Polishing with the DIAMATIC **FLOR-GRIT** pads are suggested before applying the DIAMATIC **FLOR-FINISH**. Apply the **FLOR-FINISH** according to the application instructions to protect and preserve the finished floor.

Maintenance

The floor must be maintained in order to preserve the aesthetics of the finish. Treating the surface with 2 coats of DIAMATIC **FLOR-FINISH** is required for longevity. Apply the **FLOR-FINISH** according to the product installation sheet. The surface should be kept clean as excessive wear and abrading may affect the color and gloss level of the floor. A regular maintenance schedule should be adhered to including, daily cleaning, monthly cleaning, burnishing using DIAMATIC **FLOR-CLEAN** neutral pH cleaner. The amount of traffic on the floor will dictate the frequency of the maintenance requirements.

Consult with your DIAMATIC Certified Installer for specific details.