TECHNICAL DATA SHEET

BETON COLOR DYE AP

KLINDEX solvent-based dye is formulated using extremely fine molecules of color designed to penetrate and color most concrete surface (All bond barriers must be removed prior to application of dye). It was created for use with polished concrete, but can be used as a base color or touch up for concrete that has received integral color, dry shake hardeners, acid stains or even as an overlay to itself. Prior to starting your project, always apply the dye to a sample area at the actual site in order to confirm that the floor is receptive to the dye and to establish the desired color. The addition of the PENETRATING AGENT is an integral component of the KLINDEX System.

REMEMBER that dyes will not mask or hide imperfections in the floor and may appear different in areas that have received different pours or patches.

NOTE: KLINDEX dye is for interior application only. Color will fade over time in areas where the dye is exposed to frequent UV light. The quality of UV protection in windows and doors may also determine the amount of time it takes before color must be re-applied. Concrete Slabs with high moisture content may adversly affect Klindex dye. Application of densifier prior to application of dye may reduce the effect of moisture vapor onb Klindex dye.

1. Explanation: KLINDEX solvent-based dye is packaged in powder form to be mixed with acetone by the customer. KLINDEX dye is offered in 22 standard colors. Custom colors are available for an additional fee and minimum order. Be aware that paint colors that contain a white base cannot be replicated. Dye colors can be combined to create an unlimited number of color variations. When applied properly KLINDEX dye gives great color to polished concrete floors or it can produce a look similar to an acid stain with a sealer. Anytime that KLINDEX dye is used on a process other than polished concrete, a sealer is required. This brightens the color and retards color fading over time. The KLINDEX Beton Guard, an impregnating sealer, should be applied to provide added protection against oil and water-based spills and stains. Concrete, even after becoming densified and polished, is still a porous substrate, and all densifiers require 2-6 months to attain full densification.

2. Benefits:

- Large selection of vibrant colors
- Extremely easy to apply
- Can be applied to any cementitious surface
- Packaged in dry form for easy shipping and storage
- Unlimited shelf life in powder form.

3. Mixing: KLINDEX dye is packaged in powder form in 1 quart, 1 gallon or 5 gallon increments and needs to be mixed with a corresponding amount of acetone. Empty the dye into the container of acetone and shake vigorously for approximately 30 seconds. Let the container set for 3 hours before use. The PENETRATING AGENT should be added to the mixed dye in all instances, EXCEPT when coloring very porous concrete, or applying dye around stencils where the acetone could cause adhesive release and dye bleed. The Penetrating Agent slows down the “flashing” of the acetone, allowing better dye penetration in tight, densified concrete, and in hot weather. Immediately before application, shake again for approximately 30 seconds. This will ensure that all the dye has mixed with the acetone. Wear protective gloves and safety glasses when mixing.

4. Polished Concrete Application: SURFACES MUST BE CLEAN AND DRY BEFORE APPLICATION OF THE DYE. NEW SLAB MUST HAVE CURED FOR AT LEAST 28 DAYS BEFORE APPLICATION. For best results perform a moisture content test on both newly poured and existing slabs. Slabs with a moisture content of 5 lbs per foot or less show best performance. High moisture levels may affect performance of color. Protect all adjacent surfaces that are not specified to receive the dye, as the dye will also penetrate adjacent concrete, masonry or wood finishes. Use masking materials that will not be affected by the acetone in order to keep the dye from bleeding between surfaces. The dye is best applied with the CO2 sprayers. It is recommended that only a conical tip be used as a fan tip can leave a linear pattern from the dye application. A consistent spray coverage and pattern are best achieved when using a pre-set ceramic insert conical tip and constant pressure. Maintain a container or bucket in the application area to store the tip and wand in between applications. In order to achieve the maximum life of your sprayer, immediately upon completion of your dye application, run clear acetone through the pump and wand, followed by clean water. This is recommended between color changes and prior to storing the sprayer between jobs. **CAUTION**: TAKE CARE IN MIXING, TRANSPORTING AND APPLYING THE MIXED DYES AS DRIPS OR SPILLS CAN BECOME PERMANENT. The dye particles are susceptible to air movement-protect all surfaces or equipment from dye drift.

5. ALWAYS APPLY DYE IN A SMALL TEST AREA TO CONFIRM COLOR ACCEPTANCE ON YOUR PROJECT SLAB.

Use necessary polishing steps to bring the slab up to 400 grit resin level prior to dye application. Upon completion of 400 grit resins, apply the dye in a consistent, overlapping circular motion, holding the wand approximately 12- 18 inches above the surface using a compatible sprayer and gray tip. Wait 1-2 minutes for the dye to dry. Always clean after each application of dye using an auto scrubber, white pad, and water. Perform a white rag test after cleaning to see if dye has been removed from the surface by wiping the rag firmly on the slab and checking to see if significant dye is on the rag. If so, clean until there is no residual dye on the surface. This cleaning process is necessary after each application of dye. Residual dye can bond to the resins and scuff or mark the floor. If the color prenetrated the concrete and all residual dye has been removed from the surface, you may proceed with the application of densifier. Application of dye prior to densification may help lock the color into the slab. Normally, an additional dye application is required to achieve the desired color. Apply the second application after 800 grit resins using the same process as described in the first application of dye above (after 400 grit resins). Always follow the last application of dye with cleaning and and one or more passes with resin diamonds.

6. Stain protection: Beton Guard was formulated for compatibility with the dyes, and is recommended for protection of all dyed concrete; especially in areas that will be exposed to foods or oils to provide additional water and oil-stain resistance. **ALWAYS USE A NEUTRAL CLEANER WHEN SCRUBBING OR CLEANING** Beton Guard. Non-neutral cleaning products contain chemicals that can attack the Beton Guard and cause streaking and, if they come in contact with the dye, may produce a faded dye appearance. ALWAYS USE A NEUTRAL CLEANER. Pro-Guard Stain Shield must be re-applied periodically based on the wear of the floor. The floor must be clean and dry to re-apply Stain Shield. Review the Pro-Guard Stain Shield Technical Data Sheet found in the Downloads section at www.Klindex.it for installation instructions. ADC always recommends that a stain shield product be installed and maintanined in conjunction with dyed polished concrete.

7. Coverage Rates: KLINDEX coverage rates will vary significantly from floor to floor based on the roughness of the concrete, the porosity and the mix design. Expect approximately 400 square feet per gallon for your first application, and 500-600 square feet for each additional application. Sprayer and tip design can lead to wasted dye and an inconsistent appearance. DYE IS BEING SPRAYED TOO HEAVILY IF PUDDLES ARE PRESENT. TECHNICAL DATA SHEET SOLVENT-BASED CONCRETE DYE

8. OPTIONAL-Additional Dye Application: For further enhancement of your dye color, you may apply an additional application of dye following the completion of your polishing steps. Apply and clean the dye according to the information in steps 5 and 6, then once the floor is dry, proceed to step 9.
9. OPTIONAL- Crystallization: Crystallization may be utilized to further enhance the colors and protection of the floor. It is recommended that you use either a high-speed burnisher with a pad, or a 175-rpm floor machine with steel wool. Apply following the application of the Beton Guard.
10. Floor Protection: If the floor work is not the last step to be performed prior to project turnover, then protect the floor following completion of your scope of work with a breathable covering such as kraft paper.
11. Moisture Vapor: Moisture Vapor Drive may take dye further into the concrete producing a faded appearance. Moisture content testing is recommended. Slabs with a moisture content of 5 lbs per foot or less show best performance. High moisture levels may affect performance of color.
12. Safety precautions: WARNING – Before using or handling this material, read the Material Safety Data Sheet and Warranty. KLINDEX concrete dyes are highly flammable when mixed with acetone. Great care should be taken when using this product! Acetone will produce vapors that are highly flammable and can be harmful to the applicator's health. Make sure rooms are properly ventilated. Open windows and use fans to achieve air movement. Non-explosive exhaust devices may be required in areas with poor ventilation. Make absolutely certain no source of open flame is present. Pilot lights, heaters, cigarettes, and electric tools should not be used or turned on until all vapors have dissipated. Always wear a carbon filter respirator, eye protection, and chemical resistant gloves. Devices are available to measure acetone vapors. KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

13. Warranty: This product is manufactured only for use by trained and licensed contractors and installers who have been trained in the proper use of the material. The manufacturer guarantees that the product will be of consistent color and mixture when received. The manufacturer has no control over the use of this product; therefore, no warranty, expressed or implied, is or can be made to either the effects or results of such use. In any case, the sellers and manufacturer's obligation under this warranty shall be limited to refunding the purchase price or replacing material proven defective.
14. Health Cautions: KLINDEX concrete dye is highly flammable when mixed with acetone. Always provide plenty of ventilation when applying the dye. Vapors may cause flash fires. No open flames may be present. Electrical tools, pilot lights, heaters, and cigarettes should not be used if fumes are present. Devices are available to measure acetone vapors.
* It is important to note, that as of 2/01/06 the United States Environmental
Protection Agency's June 16, 1995 volatile organic compounds (VOC) classification for acetone remains in effect. The EPA has granted acetone VOC-exempt status. In addition, acetone is not a hazardous air pollutant (HAP) under the Clean Air Act Amendment of 1990. Most states, such as California, follow these federal guidelines. Please check with your individual state if the question arises.

This information corresponds to our actual knowledge. Nevertheless, as product use conditions are out of our control, we can't take responsibilities of incorrect use consequences. We recommend doing a previous test with the product, where it wants to be applied, to evaluate the results.
Klindex S.R.L. reserves the right to modify, without notice, characteristics, models and prices.