

ULTRALIT COLORIN

CONCRETE DYE CONCENTRATE FOR INTERIOR USE

DESCRIPTION

Ultralit ColorIN Dye is part of the three-component Color System designed specifically for coloring and polishing concrete floors. To obtain optimum performance, all three components: Ultralit ColorIN Dye, Ultralit Hard and Ultralit Gloss should be used together to lock in colors for long term beauty. Dye concentrate may be diluted in Ultralit Hard Densifier, acetone or water.

BENEFITS

- Ultralit ColorIN Dye provides consistent color that penetrates the surface layer deeply, and is reactive with concrete, forming a bond that locks color into slab, minimizing color migration or diffusion
- Bonds with the other Ultralit Color System components to protect color in slab
- Is available in a broad range of vibrant colors
- Contains UV stabilizer to help protect colorants in concrete against fading
- Liquid concentrate eliminates 3-hour wait to dissolve dye required by other products
- VOC compliant (< 40 g/L)

IDEAL FOR APPLICATIONS IN

- Shopping malls
- Supermarkets
- Parking garages
- Airport hangars
- Warehouses
- Distribution centers
- Manufacturing plants
- Schools and universities
- Medical facilities
- Office buildings
- and others...

COMPOSITION

Ultralit ColorIN Dye is a concentrated liquid dispersion of nano-sized colorant particles. It is designed to be diluted by the user with Ultralit Hard Densifier, acetone or water, in a ratio of 1:16. Ultralit ColorIN Dye penetrates concrete surfaces and reacts with the concrete to form chemical bonds between the colorant and the concrete matrix. It contains a UV stabilizer to minimize fading. It chemically bonds to Ultralit Hard Densifier to lock color into the slab.

APPLICATION

Limitations:

- New concrete must cure for at least 28 days before application.
- Not intended for exterior applications.
- While in most cases the Ultralit ColorIN system will extend resistance to color fading or dissipating, due to variables in application, maintenance and the concrete itself, appearance may change over time.

Preparation:

- **WARNING:** People, property, vehicles, animals, plants and all surfaces not intended to be dyed should be protected from the product, splash, overspray and wind drift, using polyethylene sheeting or other proven protective material. If design requires discreet areas of color, mask adjoining areas, lining color edges with painter's tape or similar adhesive masking material. Surfaces, animals or clothing contacted by dye may be permanently colored.
- **NEW SLABS MUST HAVE CURED FOR AT LEAST 28 DAYS BEFORE APPLICATION.** Do not apply if concrete is frozen, dirty or has standing water. Test surface absorbency with a light water spray – concrete surface should wet uniformly. If concrete does not wet uniformly, remove any surface contaminants with appropriate cleaning treatment or mechanical process. Surfaces should be clean, structurally sound and free of all foreign materials including sealants, adhesives, bond breakers, curing compounds, curing agents, surface grease and oil and construction debris. Ground or sanded surfaces should be vacuumed thoroughly. Acid-stained concrete should be neutralized and rinsed before application of Ultralit ColorIN dye.

Mixing:

- In the Ultralit Color System: Ultralit ColorIN Dye is applied twice: once in combination with Ultralit Hard Densifier and a second time as a stand-alone dye solution.

- Mixing Ultralite ColorIN Dye and Densifier: Mix Ultralite Hard Densifier according to manufacturer's directions. Add Ultralite ColorIN Concentrate to Ultralite Hard Densifier: pour 3.8 L water into a clean, empty 5 L plastic bucket. Add 0.23 L Ultralite ColorIN Dye concentrate, mix. Add 3.8 L Ultralite Hard Densifier. Coverage varies depending on concrete mixture, porosity and moisture content and on ambient conditions. Use test areas to determine appropriate application procedure and adjust application rate. As a starting point to determine coverage: 12-17 m²/L.
- Mixing Stand-alone Dye: to add color without densifier, Ultralite ColorIN concentrate can be diluted with acetone or water in a 1:16 ratio: mix 0.23 L Ultralite ColorIN Dye concentrate with 3.8 L acetone or 0.23 L Ultralite ColorIN Dye concentrate with 3.8 L water. Coverage varies depending on concrete mixture, porosity and moisture content and on ambient conditions. Use test areas to determine appropriate application rate. As a starting point to determine coverage: 10 m²/L.

Testing:

- Prior to starting project, apply Ultralite Color System to sample area of each type of concrete to be treated, using applications procedures proposed for project. Confirm that concrete is receptive to dye or dye/densifier combination and that color is acceptable. Ambient temperature during application should be 4-38°C.

Application procedure for dye/densifier combination:

- **Equipment:** Spray apply Ultralite Color System using Patriot™ 500 or Patriot 350 or similar low pressure sprayer with Patriot Gray #8 or similar conical mist tip with 31.8 L/hr at 275.8 kPa, microfiber floor finish applicator pad.
- Grind up to 200-grit resin bond diamonds (If not using a 200-grit step, grind up to 100-grit resins).
- Remove all dust and debris. If wet cleaning is performed, allow surfaces to dry.
- Vacuum surface thoroughly.
- Spray Ultralite ColorIN Dye (stand-alone) to lightly wet surface without creating puddles. Apply in a consistent, overlapping circular motion, holding the wand approximately 30-45 cm above the surface. Dye will absorb into concrete more quickly in some places than others. This is normal and does NOT indicate that extra dye is needed.
- For acetone-dye mixtures, immediately upon completion of application, run clear acetone through the pump and wand, followed by clean water. For water-dye mixtures, clean with water only. This is recommended between color changes and prior to storing the sprayer between jobs.

- Allow surface to dry.
- Spray dye/densifier mix in an overlapping motion. Lightly use applicator to spread the mix evenly on surface. Avoid puddles. Product does not need vigorous scrubbing-in and will not form a gel. As product is absorbed into surface, apply additional product as needed until floor starts to reject the product. Over-application or puddles of excess material will lengthen drying time, and may produce white surface residue that must be removed immediately.
- Clean equipment with fresh water before product dries. Overspray on unprotected surfaces should be immediately washed off.
- Allow surface to dry.
- Polish up to 400-grit resin bond diamonds.
- Apply Ultralite ColorIN Dye (stand-alone) again for maximum color, using same method as above, if needed.
- Clean sprayer.
- Allow surface to dry.
- Remove dye residue with an autoscrubber fitted with a white pad and water. Perform white-rag test to assure that residue is removed. Wipe a dry white rag across the floor. A light tinge of residual color on the rag is acceptable, but any strong color indicates that excessive dye must still be removed. Unremoved dye residue will load resin diamonds and may produce undesirable marks.
- Polish with 800-grit resins, and 1500-grit or 3000-grit if desired.
- Apply Ultralite Gloss following manufacturer's instructions to complete protection and enhance appearance. Ultralite Gloss is strongly recommended for all colored polished concrete to protect color from staining or acidic etching agents, as well as minimizing color loss through diffusion or dispersion. Allow 24 hours for Ultralite Gloss curing time before burnishing. Chemical resistance gains strength over time. Avoid chemical exposure for first 7 days.

Application procedure for stand-alone dye:

- **Equipment:** Spray apply Ultralite ColorIN Dye using Patriot 500 or Patriot 350 or similar low pressure sprayer with Patriot Red #6 or similar conical mist tip with 24.2 L/hr 275.8 kPa flow.
- Dilute Ultralite ColorIN Dye concentrate with acetone or water, mixed as directed. Acetone will provide better penetration, especially with dense or "tight" slabs. Where solvents are not desirable, dilute Ultralite ColorIN Dye concentrate with water.

- Grind up to 200-grit resin bond diamonds (If not using a 200-grit step, grind up to 100-grit resins).
- Remove all dust and debris. If wet cleaning is performed, allow surfaces to dry.
- Vacuum surfaces thoroughly.
- Apply Ultralite ColorIN Dye to small sample area of each type of concrete to be treated to confirm that concrete is receptive to dye and color is acceptable.
- Spray a single application of Ultralite ColorIN Dye to lightly wet surface without creating puddles. Apply in a consistent, overlapping circular motion, holding the wand approximately 30-45 cm above the surface. Dye will absorb into concrete more quickly in some places than others. This is normal and does NOT indicate that extra dye is needed.
- Allow to dry.
- For acetone-dye mixtures, immediately upon completion of application, run clear acetone through the pump and wand, followed by clean water. For water-dye mixtures, clean with water only. This is recommended between color changes and prior to storing the sprayer between jobs.
- Polish with progressively finer abrasives up to 400-grit resin bond diamonds.
- Spray second application of Ultralite ColorIN Dye.
- Clean sprayer.
- Remove dye residue with an autoscrubber fitted with a white pad and water. Perform white-rag test to assure that residue is removed. Wipe a dry white rag across the floor. A light tinge of residual color on the rag is acceptable, but any strong color indicates that excessive dye must still be removed.
- Allow to dry.
- Apply Ultralite Hard according to manufacturer's directions.
- Continue polishing process 800-grit resins and 1500-grit or 3000-grit if desired.
- Apply Ultralite Gloss following manufacturer's instructions to complete protection and enhance appearance. Ultralite Gloss is strongly recommended for all colored polished concrete to protect color from staining or acidic etching agents, as well as minimizing color loss through diffusion or dispersion. Allow 24 hours for Ultralite Gloss curing time before burnishing. Chemical resistance gains strength over time. Avoid chemical exposure for first 7 days.

MAINTENANCE

- Remove dust and debris with microfiber pad or dry mop. Buff dry with high speed burnisher to enhance sheen.
- Spills of staining agents or acidic etching agents including acidic food substances (e.g. vinegar, pickle juice) should be cleaned up immediately to minimize damage to surface.
- Surface should be cleaned regularly using an automatic floor scrubber.
- DO NOT use with acidic cleaners. Autoscrubber should be fitted with non-aggressive cleaning tools such as brushes.
- Do not perform regular maintenance with aggressive pads such as diamond-impregnated pads or other abrasives. Use of aggressive pads will wear away stain protection and may, in time, wear away color from concrete surface.
- Renew Ultralite Gloss application every two years or more often depending on wear and usage conditions.

SAFETY / HEALTH INFORMATION

Before using or handling this material, read the Material Safety Data Sheet. FOR DILUTION WITH ULTRALITE HARD DENSIFIER, SEE SAFETY PRECAUTIONS ON DENSIFIER TECHNICAL DATA SHEET. For Dilution with Acetone: ULTRALITE COLORIN 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. Avoid contact with skin, eyes, and clothing: may permanently stain. KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY.

CUSTOMER SUPPORT

Ultralite ColorIN Dye is available worldwide. For technical assistance, product information, Dealer location - visit our web site at www.ultralite.eu or email at info@ultralite.eu.