

# MasterColor<sup>®</sup>

## Liquid-Coloring Admixtures

### Description

MasterColor liquid-coloring admixtures are patented, engineered, high quality coloring dispersions producing enhanced decorative concrete. MasterColor liquid-coloring admixtures are ready-to-use integral liquids that come in four base colors:

- Black
- Light Red
- Medium Red
- Yellow

The four base colors can be used to make a wide range of colors including but not limited to the colors depicted on the MasterColor Decorative Concrete Color Selector.

### Applications

Recommended for use in:

- Integrally colored decorative concrete
- Imprinted concrete
- Ready-mixed concrete
- Manufactured concrete products
- Stone veneer products
- Precast concrete
- Pervious concrete
- Self-consolidating concrete

### Features

- Liquid-coloring admixtures formulated for the automated CAM (Coloring Admixture Measuring) System
- Compatible with BASF admixtures used in the production of durable decorative concrete
- Faster dispersion into concrete

### Benefits

- Beautiful, long-lasting integrally colored concrete
- Enhanced finishing characteristics
- Color vibrancy
- Excellent color accuracy
- Batch-to-batch color consistency and verifiable color batching results
- Increased productivity and reduced labor
- Clean and simple batching
- Quality custom color services

MasterColor liquid-coloring admixtures meet the colorfastness testing of 500 hours light exposure per ASTM C 979. In addition, MasterColor liquid-coloring admixtures have successfully completed 1500 hours of aggressive Xenon Arc testing per ASTM G 155.

**Typical Properties:** Density: 14-17 lb/gal (1.68-2.04 kg/L) [@72 °F (22 °C)]

## Guidelines for Use

**General:** Due to the graying effect of most cements, there are some custom colors that can only be produced using very light or white cements. Variations in water content, cement type, color variations in cementitious materials or aggregates, finish texture, timing of operations, curing or forming methods, release agents or surface treatments may produce distinct, though in many cases slight, variations in final color. All standard color matches are completed using a medium shade of portland cement.

**Dosage:** MasterColor color formulas for standard and other regional colors are programmed into the CAM System upon installation.

MasterColor admixtures are water neutral at loading rates of 5% or less. At loading rates greater than 5%, MasterColor admixtures may provide increased water reduction depending on local concrete materials. Therefore, at loading rates above 5%, laboratory/field evaluations of MasterColor admixtures are recommended to verify desired concrete performance.

**Mixing:** With the automated CAM System, MasterColor liquid-coloring admixtures are weighed or metered and dispensed prior to or while loading concrete. Product and rinse water are calculated by the CAM System and should be included as total batch water. For best results add coloring admixtures prior to batching concrete. For post addition, mix a minimum of 4-5 minutes at normal mixing speed to assure uniformity.

For best results, truck or mixer should be clean and pre-wet with no standing water. A minimum batch size equal to 1/3 of the mixer capacity should be used as a guideline for efficient mixing. Keeping the addition order, mixing time, materials and water-cementitious materials ratio constant between multiple batches is critical for color consistency.

**Concrete Placement and Finishing:** Final color and textures should be pre-approved with a cured jobsite mock-up. In accordance with proper construction practices, slabs-on-ground shall be placed over properly compacted and prepared subgrade. Spade formed edges and consolidate and strike off surface as normal. Care should be taken to avoid over-vibration, over-working and over-finishing, or other practices that might cause excessive bleeding or significantly increase the surface mortar content.

Trowelling or broom-finishing decorative concrete should be performed in the same direction to maintain uniform appearance. Do not add additional water to the concrete either by retempering or by adding water to the surface during the finishing process.

**Curing:** Proper curing of decorative concrete is required to enhance the depth of color, provide a more uniformly colored concrete, and provide surface protection. MasterKure® CC 1315 water-based curing and sealing compound from BASF or a similar, compatible curing and sealing compound is recommended.

**Note:** Until decorative concrete is fully cured, the color may appear darker than expected. Curing with burlap, plastic sheeting, water or other curing compounds may be detrimental to color uniformity and is not recommended. For more information on curing decorative concrete contact your local sales representative.

**Maintenance:** Regular cleaning of decorative concrete is recommended. In general, resealing may be required periodically as the sealed surface wears. Maintenance applications will be accelerated in areas of heavy use or frequent or aggressive cleaning. Heavily soiled interior areas may be cleaned by wet mopping or scrubbing with a stiff-bristle brush and properly diluted, high-quality commercial detergent. For large areas, automatic scrubbers may be more efficient and cost effective.

**Clean-Up:** MasterColor liquid-coloring admixtures are water based and can be cleaned with soap and water.

## Product Notes

**Corrosivity – Non-Chloride, Non-Corrosive:** MasterColor liquid-coloring admixtures will neither initiate nor promote corrosion of reinforcing steel embedded in concrete. No calcium chloride or chloride-based ingredients are used in the manufacture of these products. Complete safety information can be found on the MasterColor liquid-coloring admixture Safety Data Sheets.

**Compatibility:** MasterColor liquid-coloring admixtures are compatible with most admixtures used in the production of quality concrete. Supplementary cementitious materials may affect color and should be checked for potential adjustments. All admixtures should be dispensed into the concrete separately. The use of calcium chloride accelerators are not recommended in decorative concrete. Final color and texture should be verified with a cured jobsite mock-up.

## Storage and Handling

**Storage Temperature:** MasterColor liquid-coloring admixtures should be stored between 40 and 100 °F (4 and 38 °C) with regular mixing or recirculation. To prevent pigment sedimentation, recirculate the material every 90 days or less. Always mix material well prior to use. Automated recirculation is included with the CAM System. If MasterColor liquid-coloring admixtures freeze, contact your local sales representative.

**Shelf Life:** MasterColor liquid-coloring admixtures have a minimum shelf life of 12 months if properly stored.

## Packaging

MasterColor liquid-coloring admixtures are available in 3,350 lb (1,520 kg) net returnable totes.

## Related Documents

Safety Data Sheets: MasterColor liquid-coloring admixture

- Black
- Light Red
- Medium Red
- Yellow

## Additional Information

For additional information on MasterColor liquid-coloring admixtures, contact your local sales representative.

*The Admixture Systems business of BASF's Construction Chemicals division is the leading provider of solutions that improve placement, pumping, finishing, appearance and performance characteristics of specialty concrete used in the ready-mixed, precast, manufactured concrete products, underground construction and paving markets. For over 100 years we have offered reliable products and innovative technologies, and through the Master Builders Solutions brand, we are connected globally with experts from many fields to provide sustainable solutions for the construction industry.*

## Limited Warranty Notice

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