



# Colored Epoxies

## Application Instructions

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Colored Epoxies manufactures high performance Architectural coatings in two part, clear and colored epoxies, that are a cost-effective solution for substrate protection. Designed for commercial, Industrial, and Residential Industries, our Epoxies have Zero VOC's and are VOHAP free. Developed to be used with decorative flake and metallic finishes.

### Typical Uses:

- Garage Floors
- Basements
- Plywood
- Concrete floors and Walls
- Schools
- Office Buildings
- Retail Floors
- Showrooms
- Food and Beverage processing facilities
- High traffic applications
- Industrial and commercial warehouses

### Overview:

Colored Epoxies will create an exciting new look for all interior floors. This guide will outline many of the steps needed to achieve dramatic floors. It is essential that an installer have Experience with these systems before taking on any projects for hire. Contact manufacturer technical department with any installation questions 866-608-7625

## Characteristics:

- Mix Ratio (2:1) Colored Epoxy Modified Flexible Epoxy must be measured and mixed at 2:1 ratio Resin (A) to Hardener (B).
- Pot Life. When properly mixed, Colored Epoxy has a working time of 40 minutes at 75°F.
- Cure time. The Colored Epoxy will take 12-24 hours to fully cure. Cure time may vary depending on temperature.
- 100% Solids
- Colored Epoxy will cure to a clear glossy coating when mixed correctly
- Inorganic Pigments. Bold vibrant colors are brought to you by the latest and greatest inorganic color pigments.

## Application Temperature:

Colored Epoxy cannot be applied in temperature below 50°F.

Substrate temperature must be above 50°F.

Please read all information on the Product Data Sheet before starting this project. Material Should never be stored in an excessively hot or cold environment. Failure to follow these guidelines will result in product failure.

## Surface Preparation:

New concrete must have cured for a minimum of 30 days. Test the concrete using the “water drop test”. While dripping water onto the floor, the concrete should readily accept the water and turn dark. Test in multiple areas throughout the project area. If the water “beads up” this is an indication that a sealer or contaminant is present. Before applying any coating the concrete must readily accept the water being dripped onto surface.

A moisture test is always recommended before considering a project on any concrete floor. The preferred testing method is a Calcium Chloride Test or Relative Humidity Test using a **Hygrometer**. Please review the Moisture Testing Guide attached.

The interior concrete floor should be clean and free of all contaminants. Remove all oil/grease contamination by using a recommended degreasing agent. If a sealer such as “Cure & Seal” or curing agent is present, it must be removed. Removal products are available. A diamond grinding will remove these coatings. Remember the concrete must readily accept water being dripped onto the surface. Applying epoxy coatings over a contaminated or sealed surface will result in a

failure in your project. See your dealer or contact manufacturer for recommendations. Any previous failing coating should be completely removed. Old sound epoxy coatings should be sanded dull using a diamond grinder or similar and any dust or debris vacuumed with HEPA vacuum.

If you are unsure of the type of coating currently on the floor. Consult your manufacturer for assistance. A test to confirm compatibility is always a good idea when starting any project.

Diamond grind the entire floor to create a CSP-2 to CSP-3 profile; once complete, vacuum all of the dust and debris. Visit [www.diamabrush.com](http://www.diamabrush.com) or follow your dealer's recommendations regarding the concrete prep process. In addition to diamabrush tools you can purchase a lavina floor grinder for large projects at [www.lavina.com](http://www.lavina.com) , you can easily use a Planetary 18" or larger concrete floor grinder using 18-20, 30-40 or 60-80 grit double bar metal trapezoids, this will do a great job in preparing your concrete for epoxy. We do not recommend Acid Washing anytime as this will not remove stains, grease, oils or sealers. Floor must be dry at all times.

Wear protective gloves and eyewear for floor preparation and applying the coating. An approved N95 dust mask or paint respirator is also recommended. Always change clothing worn during the grinding process so as not to contaminate the finishes steps with dust and debris.

**Important: Floor must be vacuumed cleaned 100% leaving no concrete dust or particles. Applying epoxy over debris, will cause fisheye, separation and bubbling. This will save on labor and time from having to sand out, and re-coat.**

### **Priming Coat:**

Wear protective gloves and eyewear. Read the Safety Data Sheet before using. Use of an approved N95 dust mask or Paint Respirator is recommended.

After the surface has been prepared (diamond grinding) and free of contaminants, apply a thin coat of your epoxy down to seal in open pores. Coverage will vary from 150 Sq.Ft to 250 Sq.Ft depending on concrete profile. Thin coats may show translucency, it is ok. Object is to seal it. By doing this first step this will allow you to sand any areas prior to applying. Follow the information on the product container and/or the Product Data Sheet regarding application methods. This product is 100% Solids, Zero VOC, and has a low viscosity to allow for excellent surface wetting and penetration. The Omni Mfe Epoxy has extended working time to promote adhesion and seal the surface. It also helps to reduce pinholes, fish eyes, craters and outgassing on topcoats. After application, inspect the concrete floor for any missed areas or pinholes. If necessary, another coat of this product can be applied following the directions within the Product Data Sheet.

### **Intermediate Coat:**

Wear protective gloves and eyewear. Read the Safety Data Sheet before using. Use of an approved N95 dust mask or Paint respirator is recommended.

After the Omni Mfe Epoxy has been applied and has dried, it's time to apply our first intermediate coat of epoxy which will be applied at 4 mils thickness or 150 Sq.Ft roughly to the gallon.

Open the Mfe Colored Epoxy kit and remove the gallon can of Hardener "Part B" and the plastic support. It is important to mix the 2 gallons 2:1 ratio, 2 parts resin "Part A" 1 part Hardener "Part B" with an electric drill for a couple of minutes at a medium speed using a "jiffy" type mixing blade. After mixing the base "Part A", open the Hardener gallon can "Part B" and slowly pour it into a pre-measured plastic container. For beginners, we recommend no more than one gallon at a time.

Mix with a "jiffy" mixing blade using an electric drill at medium speed for 3 minutes. Do not use a "mud" drywall mixer. For best results, always use a corded electric drill for mixing and always use a clean mixing blade. Using a dirty mixer may cause sharp spots on the mixing blade to scrape the pail causing plastic shavings to contaminate the mixture.

After 3 minutes of mixing pour contents into an 18" wide roller bucket or pan, (Expert pro installers can skip primer coat) spread the product evenly using a 3/16" notched or straight epoxy floor squeegee. Back roll the floor, using new (9" or 18"0 -3/8" woven, non-shedding, lint free roller. It is best to always wear epoxy spiked shoes during the epoxy installation process.

When the coating from this step has dried, it is important to inspect the surface for defects such as pinholes, caused by outgassing of the concrete, must be repaired. The pinholes can be repaired by sanding the crater and reapplying more of the intermediate coat or, if they are large, by using an epoxy crack filler RS-88 Polyurea super flexible joint filler by Metzger McGuire. Let it dry before proceeding. See our problem solver guide for tips. If the floor has visible debris, it's best to sand the entire surface using a mechanical floor machine with an 80-grit sanding screen or sandpaper and a HEPA Vac to remove dust.

### **Applying Metallic Mid-Coat or Contrasting Epoxy Colors For 3D Artistic Marbleized Floors**

Wear protective gloves and eyewear. Read the Safety Data Sheet before using. Use of an approved N95 dust mask or Paint Respirator is recommended.

This mid-coat is required to achieve the dramatic effects desired in using metallics and variable colored epoxies.

When ordering the base Primary Focal Color, it will need to be ordered in 50 Sq.Ft Coverage per gallon, second primary color should be figured at 275 Sq.Ft per gallon, and all subsequent accent colors at 375 Sq.Ft per gallon. If using metallic powder measure 4 ounces of powder to one clear gallon of Mfe Clear Epoxy Resin “Part A”, same effects can be created with using epoxy without metallic.

### **Installation:**

Let primer coat cure first. Next day 8 to 24 hours apply primary base focal color heavy 25-30 mils. 50 Sq.Ft per gallon fully roll out. Immediately apply accent colors one after the other, be sure to have spiked shoes on, splash, drizzle and pour in a ribbon design, colors will blend into one another when using your 18” x 3/8” nap roller. Entire floor must go down wet. If your room is large, break it off into quarters. Maintain always a wet edge, remember you still have 40 minutes working time. Only mix what you can spread in less than 40-minute time frame. Less is best to keep material consistently fresh from cooking off. Use new clean empty pails always when mixing colors. We recommend using a practice test panel 4x8 sheet plywood. Remember only use 3/8” woven non-shedding roller.

**Optional:** Use of MCU Super UV top coat can be used to protect epoxy from the effects of Sun Rays “yellow” and chemical resistant areas such as garages. This product has a high odor and should only be used in well ventilated areas, not for basements.

Mix with a “jiffy” type mixing blade using an electric drill at medium speed for 3 minutes. Do not use a “mud” drywall mixer. For best results use a corded electric drill for mixing. Always use a clean mixing blade.

Once the entire surface is covered, using your woven shed-resistant, 3/8” nap roller on a standard roller frame, roll in the opposite direction, the length of room one strike. Using the roller to back roll the entire area in one direction wearing your spiked shoes. It’s hard to make a mistake here, Just roll and move on. Let the surface dry 24-48 hours prior to light foot traffic. It’s always a good idea to tape off the area just in case someone forgets or doesn’t know you have a floor in process.

### **Performance Clear Coat:**

Prior to application of a top coat, it is best to do a light sanding to remove any imperfections caused by dust or dirt if any with 120 grit small disk sander. The surface must be dust free before proceeding to the clear coat.

The MCU Super Uv gloss is a great top coat choice. It’s extremely UV stable, abrasion resistant and has the best clarity on finishes. On their own, epoxies tend to yellow or amber when exposed to sunlight and scratch very easily. By adding a topcoat MCU Super UV, you’ll take care

of both issues in one thin coat. The MCU Super UV is applied at 4 mils or 400 square feet per gallon. It is best applied by a non-shedding 3/8" woven, lint-free, roller cover. It is helpful to have a person help by watching your application to ensure no spots were missed. MCU Super UV will get tacky quickly, apply evenly once. Do not roll over once applied. This step needs to be done within 24 hours after the last epoxy coat was applied. No prior sanding necessary.

**Non-Skid Additive:**

If a slip-resistant surface is desired, this will change appearance, you will need to apply Mfe Clear Coat epoxy on top of finished floor, once fully cured 8-24 hours mix Omni Non-Skid into epoxies 4 ounces. per gallon, mix well, and roll. You may toss in air to broadcast for additional texture, back roll epoxy into Non-Skid material, once cured apply MCU Super UV.

**Remember to consult your distributor or manufacturer at 866-608-7625 or [coloredepoxy.com](http://coloredepoxy.com) with FAQ. Always do a test project or ask your dealer for a referral to a contractor in your area with experience. Your dealer is a valuable resource and is always able to help with your project questions.**

