



Technical Data Bulletin

100% Solids Heavy Duty Epoxy Concrete Floor Coating

**Resists Heavy Abrasion - Over 10 Times Thicker Than Ordinary Paint
Will Not Lift or Peel From Properly Prepared Surfaces**

Garage Floors - Auto Repair Centers - Machine Shops - Commercial Kitchens - Stairways
Food Processing Areas - Loading Docks - Assembly Lines - Warehouses - Boiler Rooms

PRODUCT DESCRIPTION

This low viscosity, seamless epoxy system has a convenient one to one volumetric mixing ratio, easy application and cures to a hard, glossy, tile like surface with outstanding abrasion, impact, chemical and corrosion resistance. Recommended for concrete floors requiring resistance to light and medium industrial usage, foot, hand and fork truck traffic, and moderate chemical exposure. Also recommended for areas requiring fill properties and areas where solvent fumes are a problem. Allows for the use of a high performance system where it was previously not feasible. Has no more odor than a latex paint, and because of its solvent free characteristic, can be applied over previously painted surfaces (in good condition) without lifting. Meets low VOC requirements. Will not lift or peel from properly prepared substrates when subject to car and truck tire traffic. NOTE: The use of a non-skid aggregate additive is required where surfaces are sloped and/or subject to getting wet. Exposure to strong corrosives is not recommended.

TYPICAL USES

Concrete, masonry or steel surfaces - interior or exterior. Concrete floors exposed to forklift and heavy equipment traffic. Ideal for warehouses, industrial aisleways, chemical & food processing plants, hospitals, boiler rooms and machine shops around machinery and equipment. Areas subject to chemical spills and solvent attack. As a non-skid coating (with aggregate) on loading docks, ramps, for steps, ladders and floors. Recommended for plating areas, assembly lines, structural steel, gratings and troughs. 100% Solids Epoxy also fills, seals and waterproofs concrete blocks in one coat.

OUTSTANDING FEATURES & BENEFITS

- Highly resistant to abrasion, impact and severe traffic
- Maximum chemical resistance
- Remains flexible and resilient
- May be applied to previously painted surfaces
- Good hold-out and bridging properties over rough, porous surfaces
- Stops dusting concrete
- Easy to apply - Low odor - Solvent free
- Safe - Non-Flammable
- Low cost maintenance
- Wide range of colors available

TOOLS & EQUIPMENT NEEDED

CLEANING / DEGREASING

Floor Scrubbers, Buffers or Waxers, Pressure Washer, Brooms, Squeegees, Mops, Fans, Commercial Degreaser

ACID ETCHING

Eye Protectors, Rubber Gloves, Acid Resistant Brooms, Respirators, Buckets, Poles, Muriatic Acid Etching Solution

EPOXY APPLICATION

Heavy Duty 9" Roller Frames, 5/16 Epoxy Roller Refills, Mixing Buckets, Poles, Mixing Sticks, 3 or 4" Stiff Disposable Paint Brushes

SURFACE PREPARATION

100% Solids Epoxy Coating can be applied directly over existing finishes in good condition. But, if the old finish is peeling or degrading in any manner, it should be completely removed by scraping and sanding, grinding, scarifying, blast cleaning or by use of a paint stripper. All unsound concrete must be removed. All surfaces should be clean, dry and free from dirt, wax, grease, oils, detergents, peeling, chalking or deteriorating paints, slag, rust and other contaminants.

CONCRETE FLOORS - IMPORTANT

Surface must be thoroughly dry prior to painting. Test for moisture or dampness by taping the edges of a 2' x 2' plastic sheet on the bare surface. After 48 hours inspect for moisture or condensation under surface of plastic sheet. If moisture or condensation is present, the surface is not suitable for painting.

PRE-CLEANING

Sweep or vacuum dust and debris. All heavy build-up of dirt, asphalt, soap, oil or grease deposits must be removed before the final surface preparation. The best way of removing such deposits is by power scrubbing with the aid of grease cutting detergents. Scrape off all loose or peeling paint and any powdery substances. If necessary, chemically strip existing peeling paint or coatings. Patch holes and cracks with appropriate patching material. If necessary, sand glossy surfaces. Water rinse surface and allow to dry.

NOTE: For concrete in poor condition or for floors with excessive paint build up, it may be necessary to mechanically abrade the surface to expose and prepare the substrate.

A) UNPAINTED CONCRETE

For heavily soiled or oil-soaked floors, chemical degreasing will be necessary before acid etching. Follow pre-cleaning procedures. Acid etch with a 10% solution of muriatic acid to ensure proper coating adhesion. Apply solution at a rate of 1-½ pints per square yard. The acid solution should be worked into the surface by hard bristle brooms until complete wetting and coverage is obtained. The acid will react with the concrete surface and bubble vigorously for a few minutes. During this time, brushing should continue. After 10 or 15 minutes the bubbling will subside and a slurry will be left on the surface. This must be removed. The most effective way is by high pressure water hosing. Rinse with a 1% solution of ammonia and water to neutralize surface. Flush surface one more time and allow to dry.

NOTE: Acid etching does not remove grease. The degreasing process must be done prior to etching.

B) PREVIOUSLY PAINTED CONCRETE

Follow pre-cleaning procedures. Remove all dirt, grease, soap and oil build-up with suitable cleanser. Degrease floor (if necessary) with the recommended degreasing solution. Acid etch any unpainted surfaces. Follow "Unpainted Concrete" directions.

C) NEW/OLD CONCRETE FLOORS

Follow instructions above. Remove grease or oil. Bare spots and unpainted surfaces should be acid etched with a 10% solution of muriatic acid. Flush surface with clean water. Follow with commercial powdered cleaner in water. Rinse well and allow to dry thoroughly.

EPOXY MIXING & APPLICATION

FOR BEST RESULTS

Have all tools necessary and on hand before commencing mixing and application. Plan out your application path before starting and have areas to be coated clear of obstructions, equipment and anything that may slow down the coating process. Remember that you are working against the clock each time you mix a new kit.

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MIXING PROCEDURE

A two component material with resin and converter portions supplied in separate packages. No induction time is required. No thinning is necessary. Stir Part "B", then pour equal amounts of Part "A" and Part "B" into a clean bucket and mix vigorously while scraping sides of container. Blend thoroughly for 3 to 5 minutes. Mix only what you expect to use in a 30 minute period. If non-skid additive is to be used, slowly add now while stirring gently until mixture appears smooth (1 to 2 minutes). NOTE: Improper mixing may result in uncured spots that will remain sticky. Be sure to scrape sides and bottom of mixing container well.

POT LIFE

Up to 30 minutes at 75°F. Pot life decreases as temperature increases. Do not apply if material, substrate or ambient temperature is below 55°F or above 90°F.

APPLICATION

Apply only to properly prepared flooring surfaces. Pour material onto flooring substrate in 4 to 6 inch ribbons and roll out in one direction with a 5/16 inch nap epoxy mohair paint roller. Spread evenly without leaving puddles and then roll back in the opposite direction to even out surface. If non-skid aggregate is being used, be sure to mix material remaining in bucket from time to time to prevent settling. Coating sets to touch in 8 to 12 hours.

COVERAGE

Theoretical coverage at one mil dry film thickness is 1604 square feet per gallon, and at 12 mils dry, 134 square feet per gallon. Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements. Actual coverage runs approximately 100 to 150 square feet per gallon depending upon substrate porosity.

CURE SCHEDULE

This coating cures to a "tack free" condition overnight at temperatures of 65°F or above regardless of humidity. At lower ambient temperatures, slightly longer cure times are required. Application at temperatures below 55°F is not recommended. Overnight cure can be accelerated by raising temperature to 75 - 80°F. Light traffic can be resumed after 24 hours and heavy traffic after 3 days. Full cure is achieved in 7 days.

CLEAN-UP

All equipment should be cleaned immediately after use with xylol.

MAINTENANCE & REPAIRS

Avoid any excess build-up of dirt, wax or grease. Do not allow solvents or chemicals to sit in one place for any length of time. Clean as needed with mild detergent or floor degreaser. Keep dry and free from liquids that may cause surfaces to become slippery when wet.

If coating becomes damaged or broken, carefully chisel out small area and re-apply coating to damaged spot. Mix a small quantity of equal portions of "A" and "B" components. Apply with a small disposable paint brush and allow overnight to cure.

WARNING

Epoxy coated surfaces may become slippery when wet. The use of a non-skid aggregate additive is required where surfaces are sloped and/or subject to getting wet. Ask for details regarding mixing and application with aggregate.

CAUTION!

HARMFUL IF SWALLOWED

INJURIOUS TO EYES - CAUSES SKIN IRRITATION

Avoid eye contact or prolonged contact with skin. Wash thoroughly after handling.

FIRST AID

If swallowed, Immediately give 1 or 2 glasses of water and call Physician, Hospital Emergency Room or Poison Control Center for way to induce vomiting. In case of eye contact, flush with plenty of water for at least 15 minutes and call a physician. In case of skin contact, wash thoroughly with soap and water. If irritation persists, see a physician.

USE ONLY WITH ADEQUATE VENTILATION.

KEEP OUT OF REACH OF CHILDREN.

PRECAUTIONS

Epoxy resins and amine curing agents contain materials which may cause skin and eye irritation and/or sensitization or other allergic responses upon repeated or prolonged exposure. These products must be handled with extreme care and

in strict adherence to good industrial hygiene practices.

Before using this material, consult applicable Material Safety Data Sheets and Product Bulletins for appropriate handling procedures and handling equipment.

PRODUCT PERFORMANCE DATA

Abrasion Resistance	Excellent
Impact Resistance	Excellent
Flexibility	Good
Acid Resistance	5% Glacial Acetic
.....	10% Nitric
.....	10% Sulfuric
.....	10% Hydrochloric
.....	10% Ammonium Hydroxide
Alkali Resistance.....	50% Sodium Hydroxide
Solvent Resistance	Skydrol 500B
.....	Unleaded Gas
.....	Diesel Fuel
.....	Hydraulic Fluid
.....	Acetates
.....	Sea Water
Aromatic / Aliphatic Hydrocarbons...	No effect
Alcohol	No effect
MEK 200 double rubs	No effect
De-Ionized Water Resistance.....	No effect
	(24 hour exposure)

PRODUCT PHYSICAL DATA

Available Colors.....	EP101 Light Gray
.....	EP102 Tile Red
.....	EP103 Sand Beige
Custom Colors Available - Inquire for minimums	
Vehicle Type	Epoxy Polyamine
Pigment Type	Varies with color
Solvent Type.....	Solvent Free
Flash Point.....	Non-Flammable
Solids By Weight	100%
Solids By Volume	100%
Wt Per Gal.	13.7 - 14.2
.....	(Varies with color)
Viscosity	2500 cps

PACKAGING

2 Gal Kits (2-1 Gal Cans/1 Each Part A & B)
Non-Slip Aggregate - 2 lb. cans
(enough for 1 two gallon kit)

LIMITED WARRANTY: Since the use and application of this product is beyond the control of the seller or manufacturer, the sole responsibility under this guarantee and under any other warranty or guarantee, expressed or implied, in connection with the sale and use of this material, shall be the return of the purchase price of this material or, at the seller's option, replacement of the material, if proven defective. Neither labor costs nor any consequential damages are covered by this limited warranty. This product is sold subject to the understanding that the buyer assumes all risks of use or handling which may result in loss or damage which are beyond the control of Magnet Paint & Shellac Co., Inc. or McGREAVOR Coatings such as, incompatibility with other products and the manner of their use or application. NO OTHER EXPRESSED OR IMPLIED WARRANTY OF FITNESS OR MERCHANTABILITY IS MADE. The buyer and all users are deemed to have accepted the terms of this notice which may not be varied.

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