



MVR9 FC Epoxy **FAST CURE**

Product Information

Category: Epoxy Floor System

MOISTURE VAPOR RESISTANT 9PSI
FAST CURE

(Available in Clear & Tinted Colors)

2 gal kit

Series 2209

Description and Use:

This is two-component, 100% solids, high-build, low viscosity, low odor, chemical resistant epoxy that is **fast drying (faster than our former CA-FD)**. This highly versatile epoxy coating comes in both clear and a variety of pigmented colors. It can be used as a primer, or base coat FOR **1-DAY Epoxy Flooring Systems**.

Used for industrial floors in manufacturing plants, mechanical rooms, warehouses, commercial kitchens, and residential garages. In combination with color quartz or paint chips it can be used to create a decorative floor coating. Used with aggregate it can also be used as a mortar for overlays or repairs for concrete. **MVR9 FC withstands up to 9 lbs. of moisture vapor pressure** which is 2-3x more than polyaspartics used as a base coat over concrete. This product is to give you the peace of mind that it will not delaminate from the concrete as do polyaspartics.

This engineered product used in the following applications:

- | | |
|---|--|
| <input type="checkbox"/> Floor Overlays / Micro-Topping | <input type="checkbox"/> 3D |
| <input checked="" type="checkbox"/> Interior | <input checked="" type="checkbox"/> Epoxy Flooring |
| <input type="checkbox"/> Residential and Garages | |
| <input type="checkbox"/> Commercial Floors, Warehouse | |
| <input type="checkbox"/> Exterior | <input type="checkbox"/> Interior Walls |
| <input type="checkbox"/> Countertop | <input type="checkbox"/> Outdoor Islands |

Its significant characteristics include:

- ✓ Low-medium Viscosity
- ✓ Meets USDA COMPLIANCE criteria.
- ✓ Meets SCAQMD Low VOC compliance.
- ✓ 100% Solids
- ✓ Chemical Resistant
- ✓ High Strength
- ✓ Clear and Pigmented Options
- ✓ Durable yet Flexible
- ✓ Very Low Odor
- ✓ High-Build
- ✓ Superior Adhesion and Moisture Vapor Resistance
- ✓ Normal 1-4 Hour Dry Time pending surface and ambient temperatures.

Color:

Available in clear and multiple colors for pastel base, deep base and accent base for easy tinting. Refer to Granicrete's color chart. MVR9 FC is designed for full chip broadcast or be sealed with **tinted** Alipoly 85.

Colors: Refer to Granicrete's Color Chart.

Packaging:

2-gallon kits

(2:1 ... 1.33A to .67B ... Convenient to add "Part B" directly into the 2-gallon container of Part A.)

Coverage:

Coverage will vary depending on the condition of surface and desired thickness.

As a Base Coat anticipate 200-225 sf/gallon 400-450 sf/kit.

Inspection:

Concrete must be clean, dry, and free of grease, paint, oil, dust, curing agents, or any foreign material that will prevent proper adhesion. The concrete should be at least 2500 psi and feel like 30-grit sandpaper. The concrete should be porous and be able to absorb water. A minimum of 28 days cured is required on all concrete. Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170).

Before starting flooring work, test existing concrete slab to make sure there is no efflorescence or high levels of alkalinity. Alkalinity refers to a high pH reading which means the floor is not neutral. A high alkaline environment can cause salts to creep up through the cement called efflorescence. These salts tend to prevent or destroy the bonding of coatings to the concrete. The most common form of testing is the use of a wide-range pH paper or tape. Make sure the floors pH reading ranges between 5-9 to ensure adhesion. The testing of concrete for alkalinity can show the amount of alkalinity only at the time the test is ran and cannot be used to predict long-term conditions.

Calcium chloride tests should be conducted to determine if the concrete is sufficiently dry for an epoxy flooring installation. The calcium chloride tests should be conducted in accordance with the latest edition of ASTM F 1869, *Standard Test Method for Measuring Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride*. When running a calcium chloride test, it is important to remove any grease, oil, curing agents, etc. so accurate readings can be obtained. A rate of 9lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure for an epoxy flooring installation. If the reading ranges above 9lbs up to 15lbs, a moisture barrier system such as Granicrete MVEP can be installed to reduce the emissions.

Failing to adhere to these strict guidelines can result in product delamination, discoloration, blistering, or altogether failure of the coating system. Testing is the responsibility of the applicator. Granicrete International bears no responsibility for failures due to any of the above conditions.

Surface Preparation:

Over Concrete Surfaces: Mechanical grinding or shot blasting is the preferred method for preparing the concrete. In some cases you may prepare by acid etching, floor scrubbing with a nylon-grit brush and water blasting to achieve a clean and uniform surface that feels like 50 grit sandpaper. If acid etching is done, be sure to properly etch and then adequately neutralize by scrubbing and rinsing several times followed by power washing. The introduction of water would require a prolonged dry time before applying any coating over an acid-etched floor.

When mechanically grinding, a high-performance concrete vacuum should be used to suck up all concrete dust from the opened concrete pores so that the epoxy will bond to the concrete and not to the dust.

Over existing Epoxy: Sand the surface with a floor buffer and 100 grit sandpaper, remove debris and wipe with denatured alcohol just before new application.

Thinning:

Thinning is not needed for this product.

Mixing Tools:

1. Premix Part A mechanically for 45 seconds.
2. Shake Part B for 30 seconds.
3. Pour Part B into Part A. Mix at moderate speed with a low speed (400-600 rpm) drill motor for 2 minutes. Make sure to scrape the sides and bottom of the container during mixing.
4. After mixing is completed, pour out all from mixing container as epoxy will begin to generate heat and harden.
5. Pour out all contents and spread immediately onto the floor. You only have 15-20 minutes working time at 75F.

Application:

1. Immediately after mixing, spread a strip of the batch onto the surface along the edges where it will be "cut in", using a brush or weenie roller.
2. Pour the remaining material in ribbons near the "cut in" area and spread evenly using a Metal Flex Blade to pull material across the ribbons filling the gaps and covering the concrete between the ribbons. WORK QUICKLY. This step is to get the epoxy spread as far as you can go. WORK IN SECTIONS
3. Immediately then begin ROLLING A BLADED section using a 3/8" nap non-shed roller. Roll quickly and evenly.
4. Begin to do full broadcast of chips for adhesion.
5. Work as a team and if working on your own, work smaller section and mix up smaller 2:1 batches.

Drying Time: (Estimated as surface temperature a variable too)

1-2 hours at 77°F, 1 hour at 90F, 2-4 hours at 50F

Handling Precautions:

Refer to SDS before use.

Slip and Fall Precautions:

A non-skid surface can be achieved by broadcasting and/or back rolling Granicrete SRA (slip reduction additive).

Limitations:

- Do not apply at temperatures below 45°F or above 100°F.
- For interior use only unless protected by a UV resistant tinted coating Alipoly 85.
- Concrete must be cured for a minimum of 28 days.

Clean Up:

Uncured material can be removed with a solvent. Cured material can only be removed mechanically.

Technical Data:

Viscosity (ASTM-D-445-83, Brookfield, RVTD)	1020 cps
Tensile Strength (ASTM-D-638-86)	8850 psi
Tensile Elongation (ASTM-D-638-86)	5.6 %
Heat Deflection at 264 psi (ASTM-D-648) *	47.0 C
Shore D Hardness (ASTM-D-2240-86) *	84
Abrasion Resistance @ 1000 cycles Wt. Loss	75-80Mgs
Flash Point	>200F, 93.3C
Bond to Concrete ASTM D 4541	350 psi (Concrete fails – no epoxy)
Pencil Hardness	2H
Impact, inches-lbs Direct/Reverse	14/1
Flexural Strength (ASTM-D-790-88)	11700psi
Compressive Strength @ yield (ASTM 695-85)	11750psi
VOC	SCAQMD Compliant

Wear Personal Protective Equipment
Read SDS before using this product.
DOT – NOT Regulated

Manufacturer/Distributor Warranty: The manufacturer has control over the actual installation of this product, the manufacturer and distributor disclaim any and all warranties expressed or implied regarding color shade, appearance, and product performance at and after opening product containers. Manufacturer recommendations and suggestions are made without guarantee. Conditions of installer's and consumer's use of this product are beyond the control of manufacturer. Manufacturer disclaims any liability incurred in connection with the use of this product or information contained herein.