

# Novolac CR Epoxy CHEMICAL RESISTANT

Category: Epoxy Floor System

Black, Light Grey, Dark Grey, Tan 3-gal kit Series 2205

### **Description and Use:**

Granicrete's Novolac CR (Chemical Resistant) Epoxy is 100% solids multipurpose epoxy designed for strong chemical and strong solvent resistance. It also has higher temperature resistance withstanding temperatures as high as 220°F. For Extreme Chemical Resistance, refer to Novolac CC (Chemical Containment) Epoxy and the list of chemicals tested.

It can be used as a primer, base coat, or as a topcoat, depending on your need. Meets USDA compliance requirements. Not recommended for exterior cosmetic purposes.

Some commonly used areas for its use include containment areas, manufacturing plants, mechanical rooms, warehouses, tank linings (for high levels of chemical and solvent resistance are required), commercial kitchens, waste treatment plants, high-temperature areas of food and beverage processing plant, and pharmaceutical-chemical laboratories and wastewater treatment plants.

#### Its significant characteristics include:

- ✓ 100% Solids
- √ High Chemical Resistance
- ✓ Great Heat Resistance
- ✓ Strength and Durability
- ✓ Low Odor
- ✓ High-Build
- ✓ Superior Adhesion
- √ 12-hour recoat time

#### Color:

Available in Black, Light Grey, Dark Grey, Tan

## Packaging:

3-gallon kits (2 gallons Part A to 1 gallon Part B)

## Coverage:

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

As a Coating: 200 sq. ft. per gallon (600 sf per 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.

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(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 4.5lbs/1000 ft²/24hr period or less is an acceptable amount of vapor pressure for an epoxy flooring installation. If the reading ranges from 4.5lbs 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 all together 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:** Shot blasting or grinding is the preferred method for preparing the concrete. Seek to achieve a clean and uniform surface that feels like 50 grit sandpaper.

**Over existing Epoxy or solid substrate:** Sand the surface with a floor buffer and 60-100 grit sandpaper, remove debris and wipe with denatured alcohol just before new application.

## Thinning:

Not required.

## **Mixing Tools:**

- 1. Premix each component separately. Low speed (300 rpm) mechanical mix Part A for 2 minutes. Shake Part B for 1 minute.
- 2. Mix 2 parts A with 1-part B, by volume, into a clean container. Mix thoroughly with a low speed (300 rpm) drill motor for 2 minutes. Make sure to scrape the sides and bottom of the container during mixing.
- 3. After mixing is completed, **remove all contents from container immediately** as epoxy will begin to generate heat and begin to smoke and turn to gel and harden.
- 4. Spread immediately onto the surface as you have a limited working time of as product is spread of about 15-20 minutes (at 75°F).

## **Application:**

- 1. Optimal working temperature is 55-90F.
- 2. 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.
- 3. Pour the remaining material near the "cut in" area and spread evenly using a magic trowel, flex blade scraper or squeegee and back roll using a 3/8" non-shedding phenolic (plastic) core paint roller. (A notched trowel or squeegee will help regulate the thickness and if needed a porcupine roller will help to release trapped air and minimize bubbles.)
- 4. With the roller apply coating forwards and backwards.
- 5. Then with the roller, roll the opposite direction from #3.
- 6. Depending on the look, thickness, chemical and abrasion resistance desired, 1 to 2 coats may be applied. A second coat can be applied within 12 hours. If past 12 hours, sand the surface with a 100-grit mesh before 2nd coat or applying a sealer coat. A non-skid surface can be achieved by broadcasting and/or back rolling a washed and kiln dried aggregate into the coating.

## Working Time ... Drying Time:

20-30 minutes ... 6 hours at 77°F ... Full cure 5-7 days.

# **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 55°F or above 90°F.
- Do not apply over concrete with Moisture Vapor Emissions above 4.5lbs/1000 ft²/24hr period.
- For interior use only unless protected.
- 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:**

DRY TIME	6 HRS @ 77°
COMPRESSIVE STRENGTH	12,750 psi
FLEXURAL STRENGTH	10,700 psi
TINSILE STRENGTH	8,800 psi
ABRASION RESISTANCE	75-80 Mgs
SHORE D HARDNESS	86

Wear Personal Protective Equipment

Read SDS before using this product

DOT Regulated, LQ Capable.

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