

## **WB-P53 CLEAR**

## **Advanced Formulation July-2019**

Product Information
Category: Sealer
24 oz kit & 1.5 gal kit
Clear available in Gloss, Satin

Certified Coating

Series 2009

## **Description and Use:**

A high-solids, high performance water-based polyurethane that provides high chemical resistance and great resistance against hot tire staining. This unique two component water-based polyurethane provides performance equal to conventional solvent urethanes without the odors or associated health problems. With excellent UV protection, WB-P53 is a great choice for interior and exterior flooring where gloss retention is desired.

WB-P53 is designed to be used as a finish sealer in Granicrete's Floor Overlay, Micro-System, and epoxy floor systems. This high-performance polyurethane has been designed to be used for Residential and Commercial - Interior and Exterior flooring. It is an ideal coating for projects that require a high gloss, ease of cleaning, high wear resistance and all with a low odor. WB-P53 may also be used in high traffic; high wear areas such as an airplane hangar, automotive repair facility and retail stores.

It meets the low VOC requirements for California and used nationally and internationally as well.

WB-P53 is also used a certified National Sanitation Foundation high performance countertop coating over Crystal Top Epoxy and Poly Low Odor in Granicrete's Countertop Surfacing System.

This engineered product used in the following Granicrete Systems:		
X Floor Overlays / Concrete	3D	
X Interior (Best option)	X Epoxy Flooring	
X Exterior	X Shower FX	
X Countertop	Outdoor Islands	

#### Its significant characteristics include:

- ✓ Little to No Odor
- ✓ High Wear and Chemical Resistance
- ✓ Great UV resistance
- ✓ Convenient 2:1 Mix; A:B=2:1

#### Finish:

Gloss or Satin (Gloss may be applied directly to concrete and overlays.)

#### Coverage:

450-600 sf/1.5 gal. kit over smooth and rough surfaces pending porosity. Note: Surface must be clean and at least 28 days old. Surface should feel like 30 grit sandpaper to aid penetration and adhesion. A minimum of 400sf/kit is desired.

45-75sf per 24-oz kit pending surface porosity.

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## Packaging:

1.5-gallon kits: (1-gallon Part A to 1/2-gallon Part B)

24-oz kits: (16 oz Part A to 8 oz. Part B) (Great for shower and countertop projects.)

### 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 porous and can absorb water. A minimum of 14 days cured is required on all concrete. Relative humidity in the concrete floor slab should be below 80% (per ASTM F-2170). The concrete should be at least 2500 psi and feel like 30-grit sandpaper.

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.

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 installer as Granicrete bears no responsibility for failures due to any of the above conditions.

## Surface Preparation:

Concrete surfaces shall be bead blasted or diamond grinded to remove all surface contaminants and laitance. The concrete should be at least 2500 psi and have an ICRI concrete surface profile within 3-5. After initial preparation has occurred, inspect the concrete for imperfections and treat as necessary. Surface must be clean, structurally sound and free of chalk, wax, loose paint or curing compounds. Application over concrete requires the use of a primer.

Previously coated surfaces must be mechanically cleaned and abraded with 100 grit sandpaper or sanding screen to ensure intercoat adhesion.

All expansion joints should be honored. Cracks should be chased with a diamond crack chaser (approximately 1/4" x 1/4"), swept or blown clean.

All moisture should be kept away a min. of 72hrs before application and a min. of 72 hours after installation. This includes high humidity, sprinklers, rain, fog, dew, etc. Make sure relative humidity of the air is < 70% to ensure an even gloss finish.

## Mixing:

Premix parts A and B individually before mixing together.

Mix 2 Parts-A with 1 Part-B (by volume) together for 3 to 4 minutes with a slow speed drill mixer. Be sure to scrape sides and bottom during mixing. Material cannot be properly mixed by hand even in small batches.

Phone: 602.438.9464 Toll Free: 866.438.9464 www.granicrete.com WB-P53 has a 1-hour pot life at 77 degrees F and low humidity. Once applied to the surface avoid over rolling.

### Thinning:

As a sealer over epoxy: For proper leveling purposes, add 8-12 fl oz water to 1½ gallon mix. Mix until a homogeneous mixture and streak-free appearance is attained (approximately 3 minutes). Use care to scrape the sides of the container to ensure that no unmixed material remains.

As a sealer directly to concrete: When applying as a first coat over concrete or stained concrete, it is recommended to thin the CRU with a maximum total of 10% water (20 oz) per 1½ gallon kit. Thinning will aid in penetration and help avoid puddles and help avoid bubbles and unevenness. Make sure to proper neutralize floor if acid stained. If a second coat is to be applied, dilute this second coat with up to 5% water (10 oz).

The 24-oz kit can be thinned with 1-oz water for coating epoxied surface and up to 2.5-oz as a sealer directly over an overlay or concrete.

It is recommended that WB-P53 Gloss be used as your primer coat directly to concrete then followed by WB-P53 Satin if satin is the desired final finished.

### **Application:**

WB-P53 needs to be applied at a minimum coverage of 275 sq. ft. per gallon to prevent bubbles from curing in the finish coat. The product can be applied using a squeegee, brush, or rolled.

DO NOT ALLOW TO ACCUMULATE IN JOINTS, GROUTLINES OR LOW AREAS. If a second coat is to be applied, do so within 24 hours to avoid the need to de-gloss the first coat.

For sealing over Granicrete's Crystal Top Epoxy, follow those directions using specified roller and rolling methodology.

## **Drying Time:**

You may re-coat as soon as the surface is dry to touch or in about (but not later than 24 hours). If the 24-hour re-coat period has passed, then the surface must be de glossed with a black janitorial pad or fine sanding screen to ensure a good bond. Cooler temperatures and higher humidity will increase drying time.

Light foot traffic may be permitted in 24 hours, moving furniture back in 72 hours, heavy- traffic in 7 days.

All times are based on average temperature of 70 degrees and 50% humidity. Cooler temperatures and higher humidity will increase drying time.

# **Handling Precautions:**

Refer to SDS before using.

#### Limitations:

- Do not apply at any temperature below 50° F or above 90°F.
- No water moisture can come to the surface for at least 24 hours after application.
- Concrete must be cured for a minimum of 28 days
- Concrete should be a minimum of 2500 psi.

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- Material must be mixed mechanically for proper performance
- Product must be applied at a rate of 275 sq. ft. per gallon
- Opened material should be used within 2 days. Shelf life is 1 year from batch date.

#### Clean Up:

Soap and water will help remove un-cured material off tools, but once it is cured it will need to be removed mechanically.

#### **Technical Data:**

Wet Film Thickness per Coat: 3-5 mils Dry Film Thickness per Coat ASTM D-3363  $1\frac{1}{2}$  - 3 mils Tear Resistance ASTM D-1004-66 270 pli Tensile Strength ASTM D-412 3980 psi Ultimate Elongation ASTM D-412 30% Gloss (60 deg) ASTM D-823 85 (±5) Satin (60 deg) ASTM D-823 25 (±5) Volume Solids ASTM D-2697 <60% by volume before water dilution VOC ASTM D 2369-81 <50 q/l Pot Life (75±3°F) 60 minutes **Recoat Time** 7 hrs (min) - 24 hrs (max) Taber Abrasion ASTM D-4060-84 33.9 mg Loss, C17 Wheel, 1000g Load, 1000 Cycles Impact Resistance ASTM D-2794-84 Inch-pounds Direct 160. Reverse 160 Pencil Hardness ASTM D-3363-84 2-H Pendulum Hardness After 1 Day 43 Seconds After 7 Days 168 Seconds Mixed Viscosity at 75 F (24 C) 50% RH 800 cps Mixed viscosity with 5% water dilution 520 cps Flash Point B-SIDE <365 F A-SIDE n/a

14 Days Cured	<u>4 hrs</u>	<u>24hrs</u>
10% Acetic Acid	No Effect	No Effect
10% Sulfuric Acid	No Effect	No Effect
10% Hydrochloric Acid	No Effect	No Effect
14% Ammonium Hydroxide	No Effect	No Effect
50% Sodium Hydroxide	No Effect	No Effect
IPA - Iso-Propyl Alcohol	No Effect	No Effect
MEK - Methyl Ethyl Ketone	No Effect	No Effect
Deionized Water	No Effect	No Effect
10% Betadine	No Effect	No Effect
10% Bleach	No Effect	No Effect
Gasoline	No Effect	No Effect

Wear Personal Protective Equipment Read SDS before using this product DOT - Not Regulated

**Manufacturer/Distributor Warranty**: As neither the manufacturer nor the distributor 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 and distributor recommendations and suggestions are made without guarantee. Conditions of installer's and consumer's use of this product are beyond the control of manufacturer and distributor. Manufacturer and distributor disclaim any liability incurred in connection with the use of this product or information contained herein.

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4