

Ceramic Surface Treatment

# BulletProof™ Technical Data Sheet



**Zirconia's BulletProof™** forms a physical and chemical bond with the CeramycGuard base layer, forming a continuous composite system that is fully chemically bonded to the concrete substrate that protects against abrasion and acid attack.

**Surface Preparation:** BulletProof is to be applied only over CeramycGuard™; make sure that CeramycGuard has cured for at least 24 hours prior. Surface must be clean, dry and in sound condition. Ensure surface has no oil, dust, grease, dirt, loose rust, and other foreign material present to ensure adequate adhesion. To check that CeramycGuard is ready to accept BulletProof, test using a clean and damp white rag, by wiping at several random areas. The rag should come away clean, or with only a very light residue. If CeramycGuard can be wiped away, check ambient temperature and humidity to make sure the environment is within the recommended application conditions and allow the coating to cure another 24 hours. Refer to CeramycGuard TDS for more details.

**Mixing:** Add part B into part A and lightly stir by hand for 60 seconds. Allow mixed material to sit for 45 minutes prior to use; during this time pre-polymerization occurs and viscosity will increase.

**Note:** Material may be mixed the day prior to application, but should be stored in cool dry conditions, tightly sealed, and with little to no head space in storage container. Flush air from any head space with nitrogen to prevent accelerated aging.

**Application:** Apply at 1-3 mils wet film thickness, with a 1/4 to 3/8-inch nap shed-free roller cover. Coverage per gallon is typically 300-400 sq ft, varying based on porosity and surface profile. It is recommended to apply using a crosshatch pattern with 50% overlap, with a final unidirectional rolling to even out application. Use spiked shoes to walk the floor and reapply as needed where material is absorbing and leaving lighter/matted areas. Reapplication should continue until wet film thickness can be maintained.

## Touch-Up Window: 0-30 mins

Mask off areas of unwanted coverage, plan for cut in brush if area cannot be adequately masked off and concealed. Keep material sealed when not in use. Once mixed, material begins to age and must be discarded if any gelling occurs.

Keep area off limits from foot traffic for 24 hours after applied.



# BulletProof™

# **Product Information**

**Application Conditions:** ambient temperature between 50°F - 85°F

We recommend using a HOBO MX 1101 or similar measuring device to capture and record temperature & humidity information before, during, and at the completion of installation to ensure curing conditions have been properly met:

# Drying Schedule @ 1 mil dry thickness @ 50% RH

<u>55°F</u> <u>70°F</u> <u>85°F</u>

**To Touch:** 30 minutes 30 minutes

(Drying time is temperature, humidity, and film thickness dependent).

Pot Life: 1 year

**Shelf Life:** 1 year from date of delivery when stored in original, unopened container indoors at 35°F - 100°F

Flash Point: 14° F

Packaging: 1 gallon/3.785-liter

**Clean Up:** Clean sprayer and tools thoroughly with acetone after application to remove all leftover material. Safety Precautions: Always read the Safety Data Sheet (SDS) before use. Wear safety glasses to protect eyes, gloves, respirator, or other protective gear as necessary to avoid exposure to eyes, mouth, skin and other sensitive areas of the body.

### **Chemical Resistance**

Reagent	1 Hour	50 Hours
Hydrochloric Acid 10%	E	E
Phosphoric Acid 10%	E	Е
Sulfuric Acid 40%	E	E

**E – Excellent**, No change in pencil hardness

G - Good, 1-2 units change in pencil hardness

**F - Fair**, 3 units change in pencil hardness

**P – Poor**, 4 or more units change in pencil hardness

#### Warranty

Zirconia warrants (i) its title to the product, (ii) that the quality of the product conforms to Zirconia's standards at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT ZIRCONIA MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY ZIRCONIA. Any claim under this warranty must be made by Buyer to Zirconia in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify Zirconia of such non-conformance as required herein shall bar Buyer from recovery under this warranty. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Zirconia. Zirconia is not responsible for any consequential damages.

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