

## INSTRUCTIONS FOR USE CeramycGuard™ with ComposiCoat BP™

### **General Guidelines**

The following conditions should be met to ensure proper application:

Product	Minimum Temperature	Initial Cure / Light Loading	Full Cure / Return to Service
CeramycGuard	5°C	-	7 Days
ComposiCoat BP	5°C	-	7 Days
CeramycGuard	12°C	6 Hours	24 Hours
ComposiCoat BP	12°C	-	24 Hours

CeramycGuard must be kept  $\geq 5^{\circ}\text{C}$  for the first 24 hours after application, otherwise coating failure can/will occur.

No rain or wetting of CeramycGuard™ or ComposiCoat BP™ surfaces can occur during the entire application process and full cure.

Assets can be returned to full service and recommissioned once full cure is complete, minimum 7 days at  $\geq 5^{\circ}\text{C}$  or 24 hours at  $\geq 12^{\circ}\text{C}$ .

### **Surface Preparation**

To prepare the concrete surface for the application of CeramycGuard™ the following should be done:

- New concrete shall be allowed to fully cure before CeramycGuard™ application. Typical concrete comes to a full cure in 28 days. Fast cure concrete can be used, and manufacturer's instructions on achieving full cure must be followed.
- For existing concrete:
  - Surface must be clean of dirt, dust, oil, organic build-up, and other contaminants.
  - Pressure wash or grind surface to be coated to remove laitance (loose concrete), previous coatings, sealers, dirt, oil, curing compound, and other contaminants from surface.

### **Storage and Safety Instructions**

Package Sizes:

- CeramycGuard: 3.8 litre kits
- ComposiCoat BP: 3.8 litre can

Avoid storage under  $0^{\circ}\text{C}$  or over  $40^{\circ}\text{C}$ . Keep containers tightly closed in a cool, well ventilated place. Protect from moisture. Keep container closed when not in use. Under these conditions the products can be stored for up to 12 months.

Wear gloves and eye protection when applying.

If any of the CeramycGuard™ comes into contact with skin, use a wet cloth to immediately remove materials. Thoroughly wash skin with soap and water to remove materials.

If any of the ComposiCoat BP™ comes into contact with skin, use waterless citrus hand cleaner to remove.

If any of the ComposiCoat BP™ comes into contact with eyes, then they should be flushed with water thoroughly for 15 mins

See SDS for full safety, storage, handling, and disposal instructions – available at

<https://zirconiainc.com/safety-data-sheets/>

## STEP 1: CeramycGuard™ Application

### **Materials needed**

- 10 litre (or larger) mixing bucket
- Scraper or large plastic spatula
- Drill (minimum 1500 rpm)
- Stainless Steel mixing drill bit (Jiffy mixer or equivalent)
- 1/4" Epoxy paint roller
- Flat-edge foam brushes (for touch-ups)
- Wet cloth

### **Caution**

Personal Protective Equipment (PPE) should be worn for skin and eye protection. See SDS for full safety instructions.

### **Mixing instructions**

1. Make sure drill bit is fully secured; operate drill at HIGH speed only
2. Pour entire jug of Liquefier (Part A) into mixing bucket
3. Cut corner of Ceramic Powder (Part B) packet and slowly empty contents into mixing bucket 4. Mix on High Speed for 30 seconds or until all Ceramic Powder is incorporated
4. Scrape the unmixed Ceramic Powder down the bucket and off the drill bit
5. Mix on High Speed for an additional 30 seconds; check to ensure all Ceramic Powder is wetted, incorporated, and there are no lumps.
6. Pour entire plastic bottle of Densifier (Part C) into mixing bucket
7. Mix on High Speed for 30 seconds, and ensure Densifier is completely mixed into slurry. Allow to sit for 2 minutes, allowing components to comeingle.
8. CeramycGuard™ is now ready for use; keep bucket covered when not being applied
9. Pot life once mixed: maximum 1 hour when ambient temperature is 20°C

### **CeramycGuard™ Application Instructions**

Apply CeramycGuard™ evenly until surface is fully covered in a single coat. A second coat is not recommended. The surface should be visually free of porosity.

- Application rate is approximately 5-7 m<sup>2</sup>/litre, depending on condition of existing concrete. Maximum coating depth should be 250 microns for proper curing. This can be checked using a metric wet film thickness gauge comb.

### **Clean Up Instructions**

- Clean drill bits, rollers, brushes and other tools thoroughly with water after application to remove all leftover CeramycGuard™ material
- Allow any leftover CeramycGuard™ material to harden and dispose of as concrete recycling or in appropriate waste disposal. Hardened materials are inert and have no hazardous conditions, they are accepted in general waste. Consult local general waste guidelines.

See SDS for full safety instructions – available at <https://zirconiainc.com/safety-data-sheets/>

## STEP 2: CompositCoat BP™ Application

### **Materials needed**

- Nitrile gloves
- Respirator with Organic VOC cartridges
- 3/8" non-shed paint roller
- Flat-edge bristle/paint brushes (for touch-ups)
- Wet cloth (white colour preferred)
- Spiked shoes

### **Caution**

Respirator must be worn during application. Personal Protective Equipment (PPE) should be worn for skin and eye protection. See SDS for full safety instructions.

### **Mixing instructions**

1. Thoroughly clean intended application surface, removing all contaminants and loose debris.
2. Allow intended application surface to fully dry.
3. Ensure that intended application surface does not exceed 80 °F (27 °C)
4. Using clean pail or appropriate mixing container, empty entire contents of Part A. If mixing multiple gallons at once, pour in Part A of every gallon.
5. Pour entire contents of Part B into Part A. If mixing multiple gallons at once, pour in Part B of every gallon.
6. Using wooden stir stick, or other stirring tool, slowly and gently mix combined CompositCoat BP™ for 120 seconds and let stand for pre-polymerization (the mixed components will begin chemically interacting with each other).
7. Let mixed material stand for at least 45 mins prior to application.

### **CompositCoatBP™ Application Instructions**

- Allow CeramycGuard™ to cure for 24 hours before applying CompositCoat BP™
- Using a wet cloth, light scrub a test area of CeramycGuard™, if cloth darkens from CeramycGuard™ coming off the surface, allow CeramycGuard™ to cure for an additional 24 hours
- Put on Respirator and PPE, including nitrile gloves
- Apply 1 thin coat of CompositCoat BP™ to CeramycGuard™ surface
  - Application rate is approximately 7-9 m<sup>2</sup>/litre
- Wait 10-30 minutes for solvent to dissipate
- If matted areas appear, lightly rewet these areas, being sure to wear spikes when traversing coated sections of floor. \*Matting will appear in more highly porous areas, where material is absorbing more heavily\*
- Protect CompositCoat BP™ areas from water for a minimum of 24 hours after application

### **Clean Up Instructions**

- Clean coating roller, brushes and other tools with acetone to remove coating

See SDS for full safety instructions – available at <https://zirconiainc.com/safety-data-sheets/>

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The content supplied in this application guide ("Instructions for Use") supersedes all previous versions supplied.  
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