

# Carbyne™ SWaE250

Expoxy Primer Water Based

022525-C

BioCoat SWaE250 is a biobased water-based, two-part epoxy with excellent bonding performance on a variety of substrates. BioCoat SWaE250 has low VOC content with minimal to no odor. BioCoat SWaE250 provides an excellent base coat or primer coat for cement floors and metals. The biobased content is higher than current commercial products and does not compromise on performance.

## PRODUCT DESCRIPTION

BioCoat SWaE250 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Chemical Type</b>	Biobased epoxy resin
<b>Appearance (Mixture)</b>	Clear
<b>Viscosity</b>	Thixotropic
<b>Cure</b>	Room Temperature
<b>Components</b>	Two-component (Mixing Required)
<b>Solids Content</b>	62%
<b>Bio-based Content</b>	33%
<b>Application</b>	Bonding
<b>Components</b>	Excellent bonding Excellent Gloss One hour pot-life Anticorrosion Water based Low to no odor

## TYPICAL PROPERTIES OF UNCURED MATERI-

### Mixture

<b>Density @ 25 °C, (g/mL)</b>	1.0
<b>Viscosity (cP @ 50°C)</b>	1000 cps

## TYPICAL PROPERTIES OF CURED MATERI-

### Physical Properties

<b>Odor</b>	None
<b>Pot Life (hrs)</b>	1

www.biobond.com

<b>Dry to Touch Time (hrs)</b>	3
<b>Full Cure (days)</b>	5
<b>MEK Double Rubs</b>	4000+
<b>Adhesion to Concrete (psi) (ASTM D7234-22)</b>	>422 (concrete failure)
<b>Tensile Strength (ASTM D882)</b>	2500 psi
<b>Percent Elongation (ASTM D882)</b>	11%

## GENERAL INFORMATION

**This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials. For safe handling information on this product, consult the Safety Data Sheet (SDS)**

## SURFACE PREPARATION

### Moisture Content

**Maximum Limit:** The moisture content of the concrete substrate must typically be  $\leq 4\%$  by mass, as measured with a concrete moisture meter.

**Alternative testing:** Relative humidity tests conducted per ASTM F2170 should show values  $\leq 85\%$ .

### Surface Profile (Roughness)

**Open Texture:** The concrete substrate needs a clean, sound, and open-textured surface to ensure proper adhesion.

**Mechanical Preparation:** Achieve this open texture through mechanical means like shot blasting, grinding, or similar techniques.

**Avoid Polishing:** Do not use grinding pads that will polish the concrete surface as this is not suitable for achieving the required profile.

**Note on Porosity & Permeation:** Variations in concrete porosity due to factors like water-to-cement ratio, aggregate gradation, and admixtures can significantly affect how much epoxy penetrates the substrate. Optimal bonding is generally observed at 6-8% porosity levels.

## DIRECTIONS FOR USE

01. Mix Part B well prior to use. Use a drill mixer for best results.
02. Add all of Part B to Part A.
03. Mix 3 minutes using a drill mixer.
04. Add 80 fluid ounces of water to the 4-gallon kit. Add 19 fluid ounces of water to the 1-gallon kit.

05. Apply with brush, roller, squeegee or sprayer to substrate.
06. Mix for 3 minutes using a drill mixer.
07. Application thickness: 3 - 4 dry mills (6 - 7 wet mills)
08. Pot life: Approximately 1 hour
09. Dry Time: 3 - 4 hours under ambient conditions (70°F/21°C,
10. 30% humidity). Dry time will take longer under cooler ambient temperatures and/or higher humidity.
11. Optional next coat (polyurethane topcoat or epoxy main coat)
12. can be applied once dry to touch
13. Full Cure Time: 5 days

#### For Smaller Areas

To only use 1/2 the kit: Use half of all components provided in the kit and half of water required and follow the mixing instructions.

#### Temperature Guidelines

**Conditioning:** Store and condition all components at 65-75 °F (18-24 °C) for at least 24 hours prior to mixing.

**Application Range:** Apply only when ambient and substrate temperatures are between 50-85 °F (10-30 °C).

**Dew Point Control:** Ensure substrate temperature is at least 5 °F (3 °C) above the dew point to prevent condensation and adhesion issues.

#### STORAGE

The product can be stored in ambient conditions with the lid secured in the container or plunger closed if using in portable gun. Storage information may also be indicated on the product container labelling.

**Optimal Storage:** Store material at room temperature or ambient conditions. Storage below or above these conditions can adversely affect product properties. Material removed from containers may be contaminated during use. Do not return product to the original container. BioBond cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

#### Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. BioBond is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law. In case products are delivered by BioBond please additionally note the following: In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by BioBond Adhesives, Inc., the following disclaimer is applicable: The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. BioBond is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law. In case products are delivered by BioBond Adhesives Inc., the following disclaimer is applicable: The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, BioBond Adhesives, Inc. specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of BioBond Adhesives, Inc. products. BioBond Adhesives, Inc. specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any BioBond Adhesives, Inc. patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications. Trademark Usage Except as otherwise noted, all trademarks in this document are trademarks of BioBond Adhesives, Inc. in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.