

### Product Code:

EonCoat –Weldable Tank Bottom Coating (WTBC) Part A  
EonCoat –Weldable Tank Bottom Coating (WTBC) Part B

**General Description:** Two components, inorganic coating. It forms a continuous ceramic coating providing excellent carbon steel anti-corrosion properties.

### Product Features:

- Fast drying and rapid return to service
- Inorganic water-based, no VOC, no HAPs, no odor, and zero flame spread
- Rated for up to 1202°F (650°C), it withstands the heat from welding without compromising the coating.

### Technical Data:

|                                                                                                                                                                                                                                                                                                                   |                             |                                                                                                             |                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------|------------------------|
| <u>Color:</u> White                                                                                                                                                                                                                                                                                               | <u>Sheen:</u> Flat          | <u>Mixing Ratio:</u> 1:1                                                                                    | <u>Clean up:</u> Water |
| <u>Volume Solid:</u> 95±5%                                                                                                                                                                                                                                                                                        | <u>Thinner:</u> Do Not Thin | <u>Theoretical Coverage:</u> ~11 ft <sup>2</sup> /gallon @ 40 mils (~1 m <sup>2</sup> /liter @ 1000 micron) |                        |
| <u>Shelf Life:</u> 1 year                                                                                                                                                                                                                                                                                         | <u>Pot Life:</u> N/A        | <u>Flash Point:</u> N/A                                                                                     |                        |
| <u>Storage:</u> Do not store EonCoat in direct sunlight for a prolonged period. The minimum storage temperature is 72°F (22°C) and 114°F (46°C). When opened, containers can be used more than once when lids are tightly sealed after each use. Opened containers should be used within (1) month after opening. |                             |                                                                                                             |                        |

### Drying Schedule @ 40 mils (1000 µm(micron) Wet)

|                                                                | @ 50°F(10°C)                                                                               | @73-80°F<br>(23-27°C) | @100°F(38°C) |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------|--------------|
| To Touch:                                                      | ~8 min                                                                                     | ~3 min                | ~2 min       |
| To Handle:                                                     | 1 hour                                                                                     | ~45 min               | ~30 min      |
| To Recoat:                                                     |                                                                                            |                       |              |
| Minimum:                                                       | 10-15 min                                                                                  | 8-10 min              | 5-8 min      |
| Maximum                                                        | There is no recoat window. The coating may need to be cleaned with water before recoating. |                       |              |
| Drying time is temperature, humidity, and thickness dependent. |                                                                                            |                       |              |

### Recommended Uses

For use over properly prepared steel in the following industrial environments: Recommended service temperature -250F to 1200F (-155C to 650C)

- \* Petro-Chemical
- \* Bridges and Highways
- \* Fabrication Shops
- \* Pulp and Paper Mills
- \* Marine – Structures and Offshore

### Surface Preparation

The surface must be clean, damp to dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion and reaction with steel. The recommended surface profile should be 75 to 125 microns with an average of 100 microns or higher.

→ Refer to the product application brochure (pictures and surface requirements) for detailed surface preparation information.

Minimum recommended surface preparation:

#### For Iron and Steel:

|              |                                                                                                                                                                                                       |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Atmospheric: | SSPC – SP 6/ NACE 3 / SSPC-SP WJ-1 L/NACE WJ-1/L (with existing profile). Minimum profile required: 4 mils (100 microns). Flash rust with a damp surface is accepted. The mill scale is not accepted. |
| Immersion:   | SSPC – SP 6/ NACE 3 / SSPC-SP WJ-1 L/NACE WJ-1/L (with existing profile). Minimum profile required: 4 mils (100 microns). Flash rust with a damp surface is accepted. The mill scale is not accepted. |

#### For Concrete & Masonry

|              |                   |
|--------------|-------------------|
| Atmospheric: | SSPC-SP13/ NACE 6 |
| Immersion:   | SSPC-SP13/ NACE 6 |

### Application Conditions

|              |                                                                                                    |
|--------------|----------------------------------------------------------------------------------------------------|
| Temperature: | Surface: 50°F(10°C) minimum 120°F(49°C) maximum<br>Material: 60°F(15°C) minimum 95°F(35°C) maximum |
|--------------|----------------------------------------------------------------------------------------------------|

\* Misting with water may be required depending on surface temperature and wind conditions. Refer to the product application brochure for more information. Also, refer to the triangle graph enclosed here.

|            |                |
|------------|----------------|
| Dew Point: | No restriction |
|------------|----------------|

Relative Humidity: 20-98%

**Refer to the triangle graph on page 3 for more details about application conditions.**

### Ordering information

|            |                                                                |
|------------|----------------------------------------------------------------|
| Packaging: | 9 gallons (34 liters)                                          |
| Part A:    | 4.5 gallons (17 liters)                                        |
| Part B:    | 4.5 gallons (17 liters)                                        |
| Weight:    | 14.8 lbs./gallon (1.78 kg/liter) → 68 lbs.(31kg) bucket weight |

### Safety Precautions

Refer to the SDS sheet before use.

Published technical data and instructions are subject to change without notice. For additional technical data and instructions, contact your EonCoat representative.

### Surface Preparation Standards

| Condition of Surface | ISO 8501-1<br>BS7079:A1 | SSPC           | NACE          |
|----------------------|-------------------------|----------------|---------------|
| White metal          | Sa 3                    | SP 5           | 1             |
| Near White metal     | Sa 2.5                  | SP 10          | 2             |
| Commercial Blast     | Sa 2                    | SP 6           | 3             |
| Brush-Off Blast      | Sa 1                    | SP 7           | 4             |
| Hand Tool Cleaning   | Rusted/Pitted           | C St 2/ D St 2 | SP 2 / SP 2 - |
| Power Tool Cleaning  | Rusted/Pitted           | C St 3/ D St 3 | SP 3/ SP 3 -  |

### Application Equipment

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with water. No reduction is necessary. DO NOT REDUCE. Clean up with water.

Clean up: Water

#### Airless Spray:

Pump 30:1

Pressure 700-200 psi (4.8-22 MPa)

Hose ½ - ¼" diameter

Tip 225-543

Filter No filters are recommended. If one must use – use larger than 25 mesh (600 micron)

Reduction Do Not Reduce. Not Recommended.

Refer to product application brochure for complete detail on pump set up and instructions.

### Application Procedures

Surface preparation must be completed as indicated

#### Mixing Instructions.

**Part A WTBC:** Part A (the Acidic component of the acid-base reaction) comes in gel form. A four-blade paddle mixer needs to be used to break the gel apart. Once the gel has been broken, the material gains some fluidity. The bucket needs to be mixed with the bucket (dispersion blade) mixture. Make sure no material remains on the bottom of the bucket. ~3-5 min of mixing is needed to ensure proper mixing and no agglomerations.

**Part B WTBC:** Part B (the Basic component of acid-base reaction) needs to be mixed with a four-blade paddle mixer or conventional mixing blade. Make sure no material remains on the bottom of the bucket. ~1-3 min of mixing is needed to ensure proper product mixing with no agglomerations.

### Recommended Spraying Rate

|                    | Minimum                | Maximum                        |                                                                                     |
|--------------------|------------------------|--------------------------------|-------------------------------------------------------------------------------------|
| Wet Film Thickness | 45 mils (1125 microns) | 45-60 mils (1125-1500 microns) | Coverage: ~11ft <sup>2</sup> /gallon@40mils (~1 m <sup>2</sup> /liter @1000 micron) |
| Dry Film Thickness | 40 mils (1000 microns) | 40-60 mils (1000-1500 microns) |                                                                                     |

Refer to the product application brochure for complete application procedures and instructions to overcome issues.

To prevent sagging, follow the drying schedule.

Misting with water may be required depending on surface temperature and wind conditions. EonCoat chemically reacts with flash rust and can be applied over rust. For further details, refer to the product application brochure.

### Clean Up Instructions

Clean the spray gun and pump with water, following the instructions in the application brochure. DO NOT USE SOLVENTS.

### Performance Characteristics

|                      |                                                                                            |
|----------------------|--------------------------------------------------------------------------------------------|
| Substrate:           | Steel (Unless otherwise noted with test results)                                           |
| Surface Preparation: | SSPC – SP 6/ NACE 3 / SSPC-SP WJ-1 L/NACE WJ-1/L                                           |
| System Tested:       | EonCoat (as a primer) 17-25 mils. with acrylics/ polysiloxane/ urethane topcoats 4-8 mils. |

| Test Name                                       | Test Method                                      | Results                                                                         |
|-------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------|
| Abrasion Resistance (Primer only)               | ASTM D 4060, CS 17 wheel, 1000 cycles, 1 Kg load | 1500 Wear Cycle per Mil (WCM); 95 mg mass loss                                  |
| Adhesion*                                       | ASTM D 4541                                      | 550 psi                                                                         |
| Corrosion Resistance*                           | ASTM D 5894, 12 cycles, 4000 hours               | Rating 10 per ASTM D 610 for Rusting<br>Rating 10 per ASTM D 714 for Blistering |
| Direct Impact Resistance (Primer Only)          | ASTM D 2794                                      | 150 in. lbs.                                                                    |
| Flexibility (Primer Only)                       | ASTM D 522                                       | 18% Elongation                                                                  |
| Immersion Resistance, Salt Water                | 77°F, 2000 hours                                 | Rating 10 per ASTM D 610 for Rusting<br>Rating 10 per ASTM D 714 for Blistering |
| Immersion Resistance, Fresh Water               | 77°F, 2000 hours                                 | Rating 10 per ASTM D 610 for Rusting<br>Rating 10 per ASTM D 714 for Blistering |
| Moisture Condensation Resistance                | ASTM D 4585, 100°F, 2000 hours                   | Rating 10 per ASTM D 610 for Rusting<br>Rating 10 per ASTM D 714 for Blistering |
| Pencil Hardness (Primer Only)                   | ASTM D 3363                                      | 9H                                                                              |
| Salt Fog Resistance*                            | ASTM B 117, 4000 hours                           | Rating 10 per ASTM D 610 for Rusting<br>Rating 10 per ASTM D 714 for Blistering |
| Flame Spread and Smoke Generation (Primer Only) | UL 723                                           | Zero Flame Spread and Zero Smoke Generation                                     |
| Thermal Conductivity (Primer Only)*             |                                                  | 0.25 W/Mk @ 25°C                                                                |
| Water Vapor Transmission (Primer Only)          | ASTM E 96                                        | 2.5 perm-inch                                                                   |
| Resistance to Growth of Mold*                   | ASTM D3273                                       | Rating – 10 = Passed                                                            |
| Fire Resistance*                                | EN 13823                                         | B-s1, d0 Classified as B or Better                                              |

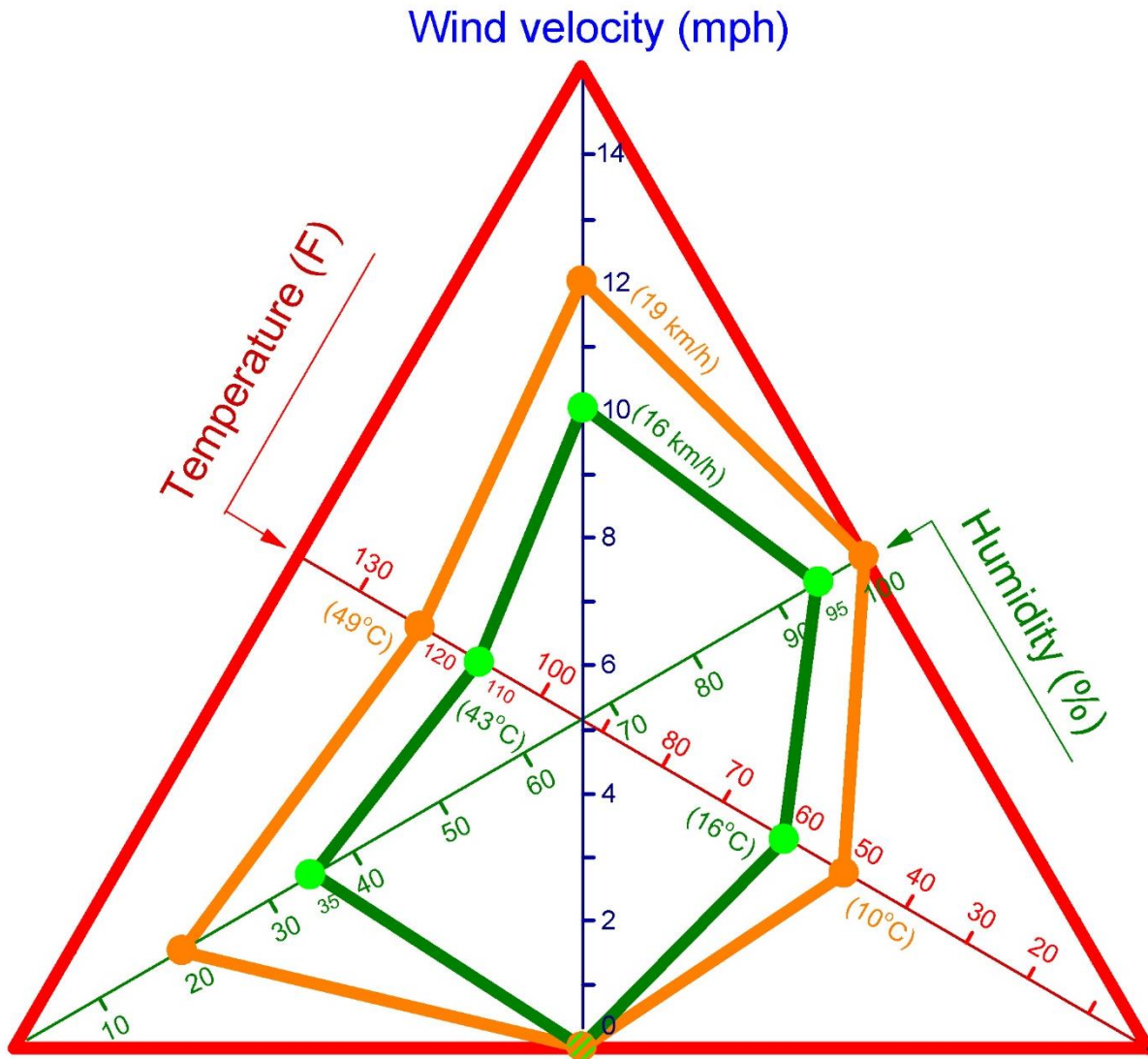
\*Tested by a third-party lab. Reports are available on request.

### Warranty

The EonCoat limited product warranty can be found on the company website at [www.eoncoat.com](http://www.eoncoat.com)

### Disclaimer

The information and recommendations outlined in this technical data sheet are based upon tests conducted by or on behalf of EonCoat, LLC. Such information and recommendations set forth herein are subject to change and pertain to the product offered in the publication. Consult your EonCoat representative for the most recent technical data sheet information and application brochure.



Using the chart above:

Apply EonCoat if conditions (wind velocity, substrate temperature, and humidity) fall inside the green line of the parameters. Mistng may be required if hairline cracking occurs. Test a small area in extreme conditions to determine the path forward.

If conditions fall between the green and orange lines, contact EonCoat for advice on how to proceed. Do not apply EonCoat if conditions fall outside the orange line (between the orange and red line or above the red line). Speak with an EonCoat representative if conditions fall outside of the orange line.