Philadelphia Coatings LLC Americas Office: 6 Georgian Row, The Woodlands, Texas, TX 77380, USA Tel: +1 832-948-5588 E-mail: info@philacoatings.com Website: philacoatings.com



**Product Data Sheet** 

# "PHILAZINC PHZC 7000"

Zinc dust for heavy environment conditions

# **Product Information**

A two pack epoxy anticorrosive zinc rich primer containing micronized zinc dust formulated to provide fast drying, rapid handling properties and excellent abrasion resistance, with high metallic zinc content (> 82 %, in the dry film thickness). Offers excellent cathodic protection, wide compatibility and fast drying to recoat. It not only tolerates damp and fresh flash rust areas but also demonstrates outstanding impact resistance and resistance to solvents and chemicals. PhilaZinc PHZC 7000 is compatible with various well known producers.

#### **Recommended Purpose**

Adapted repairs, new buildings, useful to the heavy marine, industry and offshore sections. A wide range of industrial projects, offshore structures, chemical plants, cranes and petrochemical refineries.

#### **Physical Properties**

Sheen: Matte Color: Gray Volume Solids (%): 60 ± 2 Theoretical Coverage: 8 m²/Lit at 75 microns dry (3 mils) / 125 microns wet (5 mils) Recommended Film Thickness: min 75 mic (3 mils). It may be applied up to 100 mic (4 mils). Flash Point: Mixed product >26°C VOC: 140g/Lit (material as into the container) VOC values are provided for guidance purposes only. Product Weight: 2.90 kg/l Heat resistance: 350 °C outdoors Shelf life: 12 months ASTM D412 for Elongation and Tensile Strength ASTM D4060 for Abrasion Resistance

# **Application Data**

Mixing Ratio: Basis 4 part per/volume, Curing Agent 1 part/volume.

**Readiness Time:** 15 minutes in a proper temperature.

**Thinner:** Not recommended. The material is ready for use, under special conditions use thinner for epoxy PH 300, max 5% by volume.

Painting Method: Brush: Suitable - small areas only. Typically 50 microns (2.0 mils) can be achieved.

Airless spraying is our recommendation: Tip range 0.43mm-0.53mm (17-21 thou), blowing pressure shouldn't less than 141kg/cm<sup>2</sup> (2005psi).

Air Spray (Pressure Pot): Gun DeVilbiss MBC or JGA, Air Cap 704 or 765, Fluid Tip E.

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Additional thinner maybe required. Use proper equipment.

Actual safety measures and precautions are very important from the selected method and environment work.

Emergency Contact Numbers are available World Wide upon any request.

Cleaning: Power tool cleaning and Cleaners with Thinner for Epoxy PH 300.

Pot Life: 4 hours at 10°C, 3 hours at 15°C, 2 hours at 25°C

# **Drying and Over coating Conditions**

Temperature of basis material	5°C	20°C	<b>30°</b> C
Touch Dry	2 hours	1 hour	30 minutes
Hard Dry	6 hours	4 hours	3 hours
Repainting interval (Min)	6 hours	4 hours	3 hours
Repainting interval (Max)	Extended		

# **Coating Specification**

If local temperatures are around freezing there is a long overcoat period. The systems, actual existing film esp. over coated epoxy layer, proper surface preparation, and coating application procedures should be selected, and then tested in a controlled laboratory. Design factors, statements, specific recommendations should always be valued. Please consult with Philadelphia Coatings LLC Technical Department.

# **Surface Preparation**

All surfaces to be coated should be clean, dry and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with ISO 8504:2000. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

**Abrasive Blast Cleaning**: Abrasive blast clean to Sa2½ (ISO 8501-1:2007) or SSPC-SP6. If oxidation has occurred between blasting and application of Philazinc PHZC 7000, the surface should be reblasted to the specified visual standard. Surface defects revealed by the blast cleaning process should be ground, filled, or treated in the appropriate manner.

**Shop Primed Steel**: Philazinc PHZC 7000, is suitable for application to steelwork freshly coated with zinc silicate shop primers. If the zinc shop primer shows extensive or widely scattered breakdown, or excessive zinc corrosion products, overall sweep blasting will be necessary. Other types of shop primer are not suitable for overcoating and will require complete removal by abrasive blast cleaning. Weld seams and damaged areas should be blast cleaned to Sa2½ (ISO 8501-1:2007) or SSPCSP6.

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#### Minimum recommended surface preparation:

Substrate	Minimum	Recommended
Carbon steel	St 2 (ISO 8501-1)	Sa 2 (ISO 8501-1)
Stainless steel	The surface shall be hand or machine abraded with non-metallic abrasives or bonded fibre machine or hand abrasive pads to impart a scratch pattern to the surface and to remove all polish from the surface.	Abrasive blast cleaning to achieve a surface profile using non-metallic abrasive media which is suitable to achieve a sharp and angular surface profile.
Galvanised steel	The surface shall be clean, dry and appear with a rough and dull profile.	Light brush blasting using nonmetallic abrasive leaving a clean, rough and even pattern.
Coated surfaces	Clean, dry and undamaged compatible coating (ISO 12944-4 6.1.4)	Clean, dry and undamaged compatible coating (ISO 12944-4 6.1.4)
Concrete	Low pressure water washing to a rough, clean, dry and laitance free surface.	Minimum 4 weeks curing. Moisture content maximum 5 %. Prepare the surface by means of enclosed blast shot or diamond grinding and other appropriate means to abrade the surrounding concrete and to remove laitance.

Optimum performance, including adhesion, corrosion protection, heat resistance and chemical resistance is achieved with recommended surface preparation. For other surface treatments, please consult with Philadelphia Coatings LLC.

#### Storage

Circa 12 months at 25°C, stored at dry, shaded and ventilated condition. The container/paint, must be kept sealed and away from heat and ignition.

In some markets commercial shelf life can be dictated shorter by local legislation. The above is minimum shelf life, thereafter the paint quality is subject to re-inspection.

# **Color Variation**

When applicable, products primarily intended for use as primers or antifoulings may have slight color variations from batch to batch. Such products may fade and chalk when exposed to sunlight and weathering. Color and gloss retention on topcoats/finish coats may vary depending on type of color, exposure environment such as temperature, UV intensity etc., and application quality. For further information, please consult with Philadelphia Coatings LLC.

#### Pack Size

Basis 4 Gal. (16 Lit) drum, agent 1 Gal (3,785 Lit) drum. If other packing specifications are needed, please consult with Philadelphia Coatings LLC.

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#### Shipping weight

Basis 4 Gal. (16 Lit) 65.44 lb drum, agent 1 Gal (3,785 Lit) 4.2 lb drum.

#### Health and Safety

Prior to use, obtain, consult and follow the Material Safety Data Sheet for this product concerning health and safety information. Read carefully and conform to precautions on MSDS and packing vessels. To avoid eye and skin contact, tools such as gloves, goggles and face mask etc. should be used during work with product (proper safety measures should be taken according to construction methods and circumstances). All work with the product must be carried out according to all relevant national health, safety and environment standards and codes. This product is for professional use only.

#### Limitation of liability

All information is given for guidance only and is subject to regional variation depending upon local climate and environmental condition. An excessive film thickness delays the final curing and creates sagging. Over coating interval will increase with the number of paint layers and the thickness of the paint film. For recommended paints at special circumstances, please consult with Philadelphia Coatings LLC. Apply in good weather. The relative humidity must not exceed 80% temperature of the surface to be coated must be at least 3°C above the dew point. All data from the tests is obtained under lab conditions, so Philadelphia Coatings LLC won't bear any liabilities from the condition whether the data could reflect the objective status of the actual application circumstance or not.

#### Disclaimer

The information in the product manual is based on our experiences from tests and practice. For the application without our knowledge, we could only make sure that our products themselves are warranted. We may modify the data in this product manual according to our continuous development and experience accumulation without advanced notice.