Philadelphia Coatings LLC
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Product Data Sheet

"PHILA ZISIL PZ 6003"

Zinc rich coating

Product Information

A two component, quick recoat, fast curing solvent based inorganic zinc rich ethyl silicate primer, containing 85% zinc by weight in dry film. Conforms to SSPC Paint 20 Level 1. Exceptional corrosion resistance. Provides cathodic protection. Does not contain lead, chromate or mercury.

PHILA ZISIL is very compatible with various well known producers.

Recommended Purpose

A zinc rich primer suitable for use with a wide range of high performance systems and topcoats in both maintenance and new construction of bridges, tanks, cranes, pipework, offshore structures and structural steelwork. Provides excellent corrosion protection under high temperatures when suitably top coated for correctly prepared steel substrates. Application in a wide range of environmental conditions. Easy to apply, widely compatible, and fast drying.

Physical Properties

Sheen: Matte

Color: Olive Green

Volume Solids (%): 58 ± 2

Theoretical Coverage: 7.70 m^2/Lit at 75 microns dry (3 mils)

Recommended Film Thickness: 2-3 mils (50-75 microns) dry

Flash Point: Mixed product >27°C (81°F)

VOC: 435g/Lit (mixed material as into the container) (EPA method 24)

VOC values are provided for guidance purposes only.

Specify gravity: ± 1.98 kg/Lit

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.

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

Painting Method: Do not topcoat with alkyd or alkyd urethane coatings. It is not suitable for solvent or chemical immersion. Does not require humidity to cure.

Brush: Suitable - Small areas only Typically 1.0-2.0 mils (25-50 microns) can be achieved.

Airless spraying is our recommendation: Tip Range 15-21 thou (0.38-0.53 mm) Total output fluid pressure at spray tip not less than 1593 psi (112 kg/cm^2).

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

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.

Readiness Time: 15 minutes in a proper temperature.

Pot Life: 12 hours at 5°C, 8 hours at 15°C, 6 hours at 25°C

Drying and Over coating Conditions

Temperature of basis material	5℃	20℃	30℃
Touch Dry	**Not applicable**	**Not applicable**	**Not applicable**
Hard Dry	**12 hours**	**6 hours**	**4 hours**
Repainting interval (Min)	**6 hours**	**5 hours**	**2 hours**
Repainting interval (Max)	**14 days, depend from environment temperature**		

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 before and throughout the testing process.

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. PhilaZisil cannot be applied to existing coatings. All coatings should be removed with Abrasive blast clean to a minimum of SSPC-SP6 or Sa2½ (ISO 8501-1:2007), (or SSPC-SP10 for optimum performance). If oxidation has occurred between blasting and application of Phila ZiSil, 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. Other types of shop primer are not suitable for over coating by Phila ZiSil.

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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. Repair of the damaged area can then be carried out using Philadelphia Coatings LLC recommended zinc epoxy primer.

Storage

Circa 18 months at 25°C (77 °F), 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 our 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.