



Product Data Sheet

“PHILAPHEN PHENOLIC Epoxy Undercoat & Finish”

for chemicals & product tank carriers

Product Information

A high-build special **Phenolic epoxy** paint for interior surfaces of tanks & where chemical, solvent and sea water resistance is required, especially cargo tanks of product carriers. Remarkable resistance to chemicals, solvents and sea water, durable with methanol and EDC, excellent high-build applicability, excellent anti-abrasion and impact-resistant properties.

PHILAPHEN PHENOLIC Epoxy Undercoat & Finish displays very good compatibility with various well known producers.

Recommended Purpose

Specialty coatings for high build applications with long over coating intervals, crude oils, product cargos, and ballast. Can be coated over many generic types of paints.

Physical Properties

Sheen: Glossy

Color: Light Green, Light Gray, Flame Red

Volume Solids (%): 60 ± 2

Theoretical Coverage: 3.90 m²/Lit at 125 microns dry / 265 microns wet

Recommended Film Thickness: Over 125 microns dry per coat

Flash Point: Mixed product >27°C

Density (Mixed product): 1.48 kg/ml

ASTM D412 for Elongation and Tensile Strength

ASTM D4060 for Abrasion Resistance

Application Data

Mixing Ratio: Two pack Base/Hardener 4:1.

Readiness Time: 15 minutes in a proper temperature.

Pot Life: 6 hours at 5°C, 5 hours at 10°C, 3 hours at 30°C

Curing Time: Within 2 weeks at 20°C (fully cured).

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

Painting Method: Airless spraying is our recommendation, Brush, Spray follows. Tip range 0.48mm-0.66mm (21 thou), blowing pressure shouldn't less than 100kg/cm² (2000psi). 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.

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

Drying and Over coating Conditions

Temperature of basis material	5°C	20°C	30°C
Touch Dry	3 hours	2 hours	1 hour
Hard Dry	48 hours	16 hours	12 hours
Repainting interval (Min)	24 hours	16 hours	12 hours
Repainting interval (Max)	Always under 30 days, depend from environment temperature, best period between 2 days- 7 days		

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

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

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

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

achieved with recommended surface preparation. For other surface treatments, please consult with Philadelphia Coatings LLC.

Storage

Circa 18 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.

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.