



Product Data Sheet

“PHILATHERMO”

Silicon PHR-T600

Product Information

PhilaThermo PHR-T600 is a super heat resistant silicone-based, single-component coating that can withstand continuous exposure up to 600 °C. Good adhesion properties and excellent resistance to weather conditions. Esthetical parameters will slightly change after cyclic heating and cooling down.

PhilaThermo PHR-T600 Silicon displays very good compatibility with various well-known producers.

Recommended Purpose

Ideal for use on piping, chimney, machinery and other marine structures above the sea water line.

Physical Properties

Sheen: Semi-Gloss.

Color: Aluminum, Black.

Volume Solids (%): 46 ± 2

Theoretical Coverage: 11.30 m²/Lit at 35 microns dry / 79 microns wet

Recommended Film Thickness: 35 microns dry

Flash Point: >28°C (82.4°F)

VOC: 499.00 g/Lit (material as into the container)

Application Data

Mixing Ratio: Single pack product which should be stirred well before application by stirring machine.

Thinner: Not recommended. The material is ready for use, under special conditions use Thinner PH 400, max 5% by volume.

Painting Method: Airless spraying is our recommendation, Brush, Spray follows. Tip range 0.48mm-0.53mm (21 thou), blowing pressure shouldn't less than 141kg / 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 PH 400.

Drying and Over coating Conditions

Temperature of basis material	5°C	23°C	30°C
Touch Dry	8 hours	5 hours	3 hours
Hard Dry	48 hours	24 hours	20 hours
Repainting interval (Min)	40 hours	24 hours	16 hours
Repainting interval (Max)	Unlimited		



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Coating Specification

Long overcoat period if temperatures are around freezing point. Proper selection of the systems, coating application procedures and surface preparation are made depending on actual existing film. Best specific design factors and conditions are tested in a controlled laboratory. Consult with Philadelphia Coatings LLC Technical Department before and throughout testing process.

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

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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

5 Gal. (18,9 Lit) drum, 20 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.