

# PPG HI-TEMP™ 1050 ZN

## (AMERCOAT® 872)

### DESCRIPTION

Heat-resistant modified silicone zinc primer for application in an elevated temperature coating system. Used primarily as the primer in a system with the PPG HI-TEMP 1000 V topcoat

### PRINCIPAL CHARACTERISTICS

- Formulated to withstand severe thermal cycling to 650°C (1200°F)
- Ambient temperature cure primer, with excellent weathering and corrosion resistance
- Ideal heat resistant primer where time is a priority and one needs to topcoat quickly
- Ideal primer for the PPG HI-TEMP 1000 V topcoat

### COLOR AND GLOSS LEVEL

- Gray
- Flat

### BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.5 kg/l (12.5 lb/US gal)
Volume solids	42 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 256.0 g/kg max. 420.0 g/l (approx. 3.5 lb/US gal)
Temperature resistance	To 650°C (1200°F)
Recommended dry film thickness	38 - 50 µm (1.5 - 2.0 mils)
Theoretical spreading rate	11.1 m <sup>2</sup> /l for 38 µm (449 ft <sup>2</sup> /US gal for 1.5 mils)
Dry to touch	30 minutes
Dry to overcoat	4 hours
Dry to handle	24 hours
Shelf life	At least 12 months when stored cool and dry

#### Notes:

- See ADDITIONAL DATA – Spreading rate and film thickness
- See ADDITIONAL DATA – Overcoating intervals

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### RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

#### New or corroded surfaces

- All surfaces to be coated must be dry and free of all chlorides, weld splatter, oil, dirt, grease and all other contaminants. Round off all rough welds and sharp edges. Abrasive blast to an SSPC-SP 10 "Near White Blast" (ISO-Sa2½). Blast profile should be 25 to 38 µm (1.0 to 1.5 mils) in depth. If abrasive blasting is not permitted, prepare according to SSPC-SP 11 "Power Tool Cleaning to Bare Metal" (ISO-St2) with a minimum of 25 µm (1.0 mil) profile.

#### Substrate temperature

- Substrate temperature during application and curing should be between 10°C (50°F) and 49°C (120°F)
- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point

### SYSTEM SPECIFICATION

#### Uninsulated steel

- PPG HI-TEMP 1050 ZN: 38 to 50 µm (1.5 to 2.0 mils)
- PPG HI-TEMP 1000 V: 38 to 50 µm (1.5 to 2.0 mils) DFT

Note: Do not exceed recommended dry film thickness

### INSTRUCTIONS FOR USE

- PPG HI-TEMP 1050 ZN primer is a two-component coating system. First mix the base liquid with a paddle or mechanical agitation. Next, sift the zinc dust into the liquid base using mechanical agitation for mixing. Mix until uniform in consistency. Thinning is not normally needed. If a condition warrants thinning, only PPG thinners should be used and in accordance with applicable regulations.

#### Air spray

##### **Recommended thinner**

- THINNER 21-06 (PPG HI-TEMP THINNER 11/AMERCOAT 65)
- THINNER 91-10 or PPG HI-TEMP THINNER 10 (VOC compliant)

##### **Volume of thinner**

0 - 5%, depending on required thickness and application conditions

##### **Nozzle orifice**

1.8 – 2.2 mm (approx. 0.070 – 0.087 in)

##### **Nozzle pressure**

0.4 - 0.6 MPa (approx. 4 - 6 bar; 58 - 87 p.s.i.)

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## Airless spray

### Recommended thinner

- THINNER 21-06 (PPG HI-TEMP THINNER 11/AMERCOAT 65)
- THINNER 91-10 or PPG HI-TEMP THINNER 10 (VOC compliant)

### Volume of thinner

0 - 5%, depending on required thickness and application conditions

### Nozzle orifice

Approx. 0.43 – 0.53 mm (0.017 – 0.021 in)

### Nozzle pressure

20.7 MPa (approx. 207 bar; 3003 p.s.i.)

## Cleaning solvent

- THINNER 21-06 (PPG HI-TEMP THINNER 11/AMERCOAT 65)
- THINNER 91-10 or PPG HI-TEMP THINNER 10 (VOC compliant)

## ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
38 µm (1.5 mils)	11.1 m <sup>2</sup> /l (449 ft <sup>2</sup> /US gal)
50 µm (2.0 mils)	8.4 m <sup>2</sup> /l (337 ft <sup>2</sup> /US gal)

Curing time for DFT up to 50 µm (2.0 mils)			
Substrate temperature	Dry to touch	Dry to overcoat	Dry to handle
20°C (68°F)	30 minutes	4 hours	24 hours

Note: When shipping and handling equipment coated with PPG HI-TEMP 1050 ZN primer follow procedures for thin film coatings. Avoid mechanical damage and abrasion

## SAFETY PRECAUTIONS

- The product is for use only by professional applicators in accordance with information in this product data sheet and the applicable material safety data sheet (MSDS). Refer to the appropriate MSDS before using this material. All use and application of this product should be performed in compliance with all relative federal, state and local, health, safety and environmental regulations or in compliance with all pertinent local, regional and national regulations as well as good safety practices for painting, and in conformance with recommendations in SSPC PA 1, "Shop, Field and Maintenance Painting of Steel."

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## WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

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## REFERENCES

• CONVERSION TABLES	INFORMATION SHEET	1410
• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411

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## WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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