

# SF ZINC PRIMER

## DESCRIPTION

Two-component, polyamide-cured epoxy zinc shop primer, with fast-dry properties

## PRINCIPAL CHARACTERISTICS

- Suitable for automatic and manual application
- Excellent anticorrosive properties
- Fast-dry properties
- Compatible with a wide range of products to be overcoated
- Versatile shop and field primer

## COLOR AND GLOSS LEVEL

- Gray, blue
- 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	27 ± 2%
VOC (Supplied)	UK PG 6/23(92) Appendix 3: max. 635.0 g/l (approx. 5.3 lb/US gal)
Recommended dry film thickness	15 - 30 µm (0.6 - 1.2 mils)
Theoretical spreading rate	18.0 m <sup>2</sup> /l for 15 µm (722 ft <sup>2</sup> /US gal for 0.6 mils) 9.0 m <sup>2</sup> /l for 30 µm (361 ft <sup>2</sup> /US gal for 1.2 mils)
Dry to touch	5 minutes
Overcoating Interval	Minimum: 5 minutes Maximum: Unlimited
Shelf life	Base: at least 24 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

Note: See ADDITIONAL DATA – Spreading rate and film thickness

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Immersion exposure

- Steel or steel with not approved zinc silicate shop primer; blast cleaned (dry or wet) to ISO-Sa2½, blasting profile 30 - 75 µm (1.2 - 3.0 mils)
- Steel with approved zinc silicate shop primer; weld seams and areas of damaged shop primer or breakdown should be blast cleaned to ISO-Sa2½, blasting profile 30 - 75 µm (1.2 - 3.0 mils) or power tool cleaned to SPSS-Pt3



# SF ZINC PRIMER

## **IMO-MSC.215(82) requirements for water ballast tanks**

- Steel; ISO 8501-3:2006 grade P2, with all edges treated to a rounded radius of minimum 2 mm (0.079 in) or subject to three pass grinding or at least equivalent process before painting
- Steel or steel with not approved zinc silicate shop primer; blast cleaned to ISO-Sa2½, blasting profile 30 - 75 µm (1.2 - 3.0 mils)
- Steel with approved zinc silicate shop primer; weld seams and areas of shop primer damage or break down should be blast cleaned to Iso-Sa 2½ blasting profile 30 - 75 µm (1.2 - 3.0 mils): [1] For shop primer with IMO type approval; no additional requirements; [2] For shop primer without IMO type approval; blast cleaned to ISO-Sa2 removing at least 70% of intact shop primer, blasting profile 30 - 75 µm (1.2 - 3.0 mils)
- Dust quantity rating "1 for dust size class "3", "4" or "5", lower dust size classes to be removed if visible on the surface to be coated without magnification (ISO 8502-3:1992)
- Primed steel or previous coat must be dry and free from any contamination

## **Atmospheric exposure conditions**

- Steel; blast cleaned to ISO-Sa2½, blasting profile 30 - 75 µm (1.2 - 3.0 mils) or according to ISO-St3
- Shop primed steel; pretreated to SPSS-Pt3 / SSPC-SP3
- Galvanized steel; for atmospheric exposure conditions disc sanding, and for water immersed exposure conditions sweep blasting is required

## **Substrate temperature and application conditions**

- Substrate temperature during application and curing should be above -5°C (23°F)
- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point
- Relative humidity during application and curing should not exceed 85%

## **INSTRUCTIONS FOR USE**

### **Mixing ratio by volume: base to hardener 80:20 (4:1)**

- Mix thoroughly by a mechanical mixer before application
- Agitate continuously during application

### **Induction time**

None

### **Pot life**

24 hours at 20°C (68°F)



# SF ZINC PRIMER

## Air spray

### **Recommended thinner**

THINNER 91-92

### **Volume of thinner**

10 - 20%

### **Nozzle orifice**

1.0 - 1.5 mm (approx. 0.040 - 0.060 in)

### **Nozzle pressure**

0.3 - 0.6 MPa (approx. 3 - 6 bar; 44 - 87 p.s.i.)

---

## Airless spray

### **Recommended thinner**

THINNER 91-92

### **Volume of thinner**

0 - 20%

### **Nozzle orifice**

Approx. 0.43 - 0.48 mm (0.017 - 0.019 in)

### **Nozzle pressure**

15.0 MPa (approx. 150 bar; 2176 p.s.i.)

---

## Brush/roller

### **Recommended thinner**

THINNER 91-92

### **Volume of thinner**

0 - 5%

---

## Cleaning solvent

THINNER 90-53

---

## **ADDITIONAL DATA**

<b>Spreading rate and film thickness</b>	
<b>DFT</b>	<b>Theoretical spreading rate</b>
15 µm (0.6 mils)	18.0 m <sup>2</sup> /l (722 ft <sup>2</sup> /US gal)
30 µm (1.2 mils)	9.0 m <sup>2</sup> /l (361 ft <sup>2</sup> /US gal)

---

# SF ZINC PRIMER

## Overcoating interval for DFT up to 30 µm (1.2 mils)

Overcoating with...	Interval	-5°C (23°F)	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
various two-component epoxy coatings	Minimum	4 hours	2 hours	2 hours	1.5 hours	1 hour	45 minutes
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

Note: Before overcoating, ensure surface is clean and free from zinc salts and other contamination

## Curing time for DFT up to 30 µm (1.2 mils)

Substrate temperature	Dry to touch	Dry to handle	Full cure
-5°C (23°F)	50 minutes	4 hours	30 days
5°C (41°F)	10 minutes	2 hours	15 days
10°C (50°F)	7 minutes	2 hours	7 days
20°C (68°F)	5 minutes	1.5 hours	5 days
30°C (86°F)	4 minutes	1 hour	4 days
40°C (104°F)	3 minutes	45 minutes	3 days

Note: Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

## Pot life (at application viscosity)

Mixed product temperature	Pot life
5°C (41°F)	36 hours
10°C (50°F)	30 hours
20°C (68°F)	24 hours
30°C (86°F)	10 hours
40°C (104°F)	6 hours

## SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes

## 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.



# SF ZINC PRIMER

## REFERENCES

• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
• SAFETY INDICATIONS	INFORMATION SHEET	1430
• SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431
• CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490
• PPG PROTECTIVE & MARINE COATINGS' BALLAST TANK WORKING PROCEDURES NEW-BUILDING		

## 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.

## LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at [www.ppgpmc.com](http://www.ppgpmc.com). The English text of this sheet shall prevail over any translation thereof.

The PPG logo, and all other PPG marks are property of the PPG group of companies. All other third-party marks are property of their respective owners.

