

# PPG SIGMAZINC™ 100

## DESCRIPTION

Two-component, polyamide-curing zinc primer

## PRINCIPAL CHARACTERISTICS

- Designed as a system primer for various paint systems
- Good corrosion prevention properties
- Quick-drying, can be overcoated after a short interval
- The subsequent coat must be unsaponifiable

## COLOR AND GLOSS LEVEL

- Gray
- Flat

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.8 kg/l (15.0 lb/US gal)
Volume solids	58 ± 2%
VOC (Supplied)	Directive 2010/75/EU, SED: max. 210.0 g/kg max. 420.0 g/l (approx. 3.5 lb/US gal)
Recommended dry film thickness	50 - 100 µm (2.0 - 4.0 mils) depending on system
Theoretical spreading rate	16.6 m <sup>2</sup> /l for 35 µm (665 ft <sup>2</sup> /US gal for 1.4 mils)
Dry to touch	1 hours
Overcoating Interval	Minimum: 2.5 hours Maximum: 3 months
Full cure after	7 days
Shelf life	Base: at least 24 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

Notes:

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

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

- Steel; shot blast cleaned to ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)



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## **Substrate temperature**

- Substrate temperature during application and curing should be above 5°C (41°F)
  - Substrate temperature during application and curing should be at least 3°C (37°F) above dew point
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## **INSTRUCTIONS FOR USE**

### **Mixing ratio by volume: base to hardener 4:1**

- The temperature of the mixed base and hardener should preferably be above 15°C (59°F), otherwise extra thinner may be required to obtain application viscosity
  - Adding too much thinner results in reduced sag resistance and slower cure
  - Thinner should be added after mixing the components
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### **Pot life**

5 hours at 20°C (68°F)

Note:

- See ADDITIONAL DATA – Pot life
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### **Air spray**

#### **Recommended thinner**

THINNER 91-92

#### **Volume of thinner**

0 - 20%, depending on required thickness and application conditions

#### **Nozzle orifice**

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

#### **Nozzle pressure**

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

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**Airless spray**

**Recommended thinner**

THINNER 91-92

**Volume of thinner**

0 - 10%, depending on required thickness and application conditions

**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%

Notes:

- Application by brush may show brush marking, due to the thixotropic nature of the paint and is most suitable to small areas, tight angle areas or for stripe coating or touch-up
- Application by roller will leave roller marking and is suitable for minimum DFT requirements only
- A roller suitable for epoxy application must be used

**Cleaning solvent**

- THINNER 90-53

**ADDITIONAL DATA**

Spreading rate and film thickness	
DFT	Theoretical spreading rate
50 µm (2.0 mils)	11.6 m <sup>2</sup> /l (465 ft <sup>2</sup> /US gal)
75 µm (3.0 mils)	7.7 m <sup>2</sup> /l (310 ft <sup>2</sup> /US gal)
100 µm (4.0 mils)	5.8 m <sup>2</sup> /l (233 ft <sup>2</sup> /US gal)



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Overcoating interval for DFT up to 75 µm (3.0 mils)						
Overcoating with...	Interval	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	8 hours	5 hours	2.5 hours	1.5 hours	1 hours
	Maximum	3 months	3 months	3 months	3 months	3 months

Notes:

- Zinc rich primers can form zinc salts on the surface; preferably they should not be weathered for long periods before overcoating
- Before overcoating visible surface contamination must be removed by high-pressure water cleaning, sweep blasting or mechanical cleaning

Curing time for DFT up to 50 µm (2.0 mils)			
Substrate temperature	Full cure	Dry to touch	Dry to handle
5°C (41°F)	21 days	3 hours	8 hours
10°C (50°F)	15 days	2 hours	5 hours
20°C (68°F)	7 days	1 hour	3 hours
30°C (86°F)	6 days	30 minutes	1.5 hours
40°C (104°F)	4 days	15 minutes	1 hour

Note:

- Adequate ventilation must be maintained during application and curing

Pot life (at application viscosity)	
Mixed product temperature	Pot life
10°C (50°F)	10 hours
20°C (68°F)	5 hours
30°C (86°F)	3 hours
40°C (104°F)	2 hours

## SAFETY PRECAUTIONS

- See Safety Data Sheet and product label for complete safety and precaution requirements
- 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



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## WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & 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

- Information sheet | Explanation of product data sheets

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## WARRANTY

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