

# SIGMAZINC™ 68 GP

## DESCRIPTION

Two-component, high solids polyamine adduct cured zinc rich epoxy primer

## PRINCIPAL CHARACTERISTICS

- Designed as a system primer in various paint systems for aggressive environments
- Suitable for use in offshore and onshore environments with ISO 12944-2 corrosivity categories of C5 and CX (offshore)
- Meets the requirements of Norsok M-501 rev. 6, System 1
- Quick-drying, can be overcoated after a short interval
- Complies with the compositional requirements of ISO 12944-5
- Complies with the compositional requirements of SSPC-Paint 20, Level 2
- The zinc dust used in this product complies with minimum ASTM D520 Type II

## COLOR AND GLOSS LEVEL

- Gray, reddish gray
- Flat

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	2.4 kg/l (20.0 lb/US gal)
Volume solids	68 ± 2%
VOC (Supplied)	Directive 2010/75/EU, SED: max. 130.0 g/kg max. 310.0 g/l (approx. 2.6 lb/US gal)
Recommended dry film thickness	50 - 150 µm (2.0 - 6.0 mils) depending on system
Theoretical spreading rate	13.6 m <sup>2</sup> /l for 50 µm (545 ft <sup>2</sup> /US gal for 2.0 mils) See spreading rate tables
Dry to touch	20 minutes
Overcoating Interval	Minimum: 1.5 hours See overcoating tables
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

Note: See ADDITIONAL DATA – Curing time

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

- Steel; blast cleaned to ISO-Sa2½ (SSPC SP-10), blasting profile 40 – 70 µm (1.6 – 2.8 mils)



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## **Substrate temperature**

- Substrate temperature during application should be at least 0°C (32°F)
  - Substrate temperature during application and curing should be at least 3°C (5°F) above dew point
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## **INSTRUCTIONS FOR USE**

### **Mixing ratio by volume: base to hardener 90:10 (9:1)**

- The temperature of the paint 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
  - Thinner should be added after mixing the components
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### **Induction time**

None

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### **Pot life**

6 hours at 20°C (68°F)

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### **Air spray**

#### **Recommended thinner**

THINNER 91-92 or THINNER 91-82 (AMERCOAT T-10)

#### **Volume of thinner**

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

#### **Nozzle orifice**

1.5 - 2.5 mm (approx. 0.060 - 0.100 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 or THINNER 91-82 (AMERCOAT T-10)

#### **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**

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

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## Brush/roller

### Recommended thinner

THINNER 91-92 or THINNER 91-82 (AMERCOAT T-10)

### Volume of thinner

0 – 5%

## Cleaning solvent

THINNER 90-53, THINNER 90-58 (AMERCOAT 12) OR THINNER 21-06 (AMERCOAT 65)

## ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
50 µm (2.0 mils)	13.6 m <sup>2</sup> /l (545 ft <sup>2</sup> /US gal)
60 µm (2.4 mils)	11.3 m <sup>2</sup> /l (454 ft <sup>2</sup> /US gal)
75 µm (3.0 mils)	9.1 m <sup>2</sup> /l (364 ft <sup>2</sup> /US gal)
100 µm (4.0 mils)	6.8 m <sup>2</sup> /l (273 ft <sup>2</sup> /US gal)

Overcoating interval for DFT up to 100 µm (4.0 mils)						
Overcoating with...	Interval	0°C (32°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
subsequent coating	Minimum	6 hours	3 hours	1.5 hours	1 hour	30 minutes
	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 100 µm (4.0 mils)			
Substrate temperature	Dry to touch	Dry to handle	Full cure
0°C (32°F)	1.5 hours	6 hours	20 days
10°C (50°F)	1 hour	3 hours	15 days
15°C (59°F)	40 minutes	2 hours	10 days
20°C (68°F)	20 minutes	1.5 hours	7 days
30°C (86°F)	10 minutes	1 hour	5 days

### Notes:

- Adequate ventilation must be maintained during application and curing
- In case of application at air or surface temperature below 5°C (41°F), the temperature of the mixed paint is recommended to be higher than 10°C (50°F)



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## 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

## 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.

## REFERENCES

- EXPLANATION TO PRODUCT DATA SHEETS INFORMATION SHEET 1411

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