

# SIGMAZINC™ 68 SP / AMERCOAT® 68 SP

## 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
- Excellent anticorrosive properties
- Quick-drying, can be overcoated after a short interval
- Very good primer for systems with high solids epoxy buildcoats
- Complies with the compositional requirements of ISO 12944-5
- Meets the requirements of Norsok M-501 rev. 6, System 1

## COLOR AND GLOSS LEVEL

- Reddish gray
- Flat

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	3.0 kg/l (25.0 lb/US gal)
Volume solids	70 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 106.0 g/kg max. 310.0 g/l (approx. 2.6 lb/US gal) EPA Method 24: 300.0 g/ltr (2.5 lb/USgal)
Recommended dry film thickness	50 - 100 µm (2.0 - 4.0 mils) depending on system
Theoretical spreading rate	11.7 m <sup>2</sup> /l for 60 µm (468 ft <sup>2</sup> /US gal for 2.4 mils)
Dry to touch	3 hours
Overcoating Interval	Minimum: 3 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

### Notes:

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



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## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Immersion exposure

- Steel; blast cleaned to ISO-Sa2½ (SSPC SP-10), blasting profile 40 – 70 µm (1.6 – 2.8 mils)
- Steel with approved zinc silicate shop primer; pretreated according to ISO-Sa1 (SPSS-SP7)

### Atmospheric exposure conditions

- Steel; blast cleaned to ISO-Sa2½ or minimum SSPC SP-6, blasting profile 40 – 70 µm (1.6 – 2.8 mils)
- Steel with approved zinc silicate shop primer; pretreated according to ISO-Sa1 (SPSS-SP7) or power tool cleaned to ISO-St3 (SSPC SP3)

### 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 (5°F) above dew point

## 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

### Induction time

None

### Pot life

8 hours at 20°C (68°F)

### Air spray

#### **Recommended thinner**

THINNER 91-92

#### **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

**Volume of thinner**

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

**Nozzle orifice**

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

**Nozzle pressure**

20.0 MPa (approx. 200 bar; 2901 p.s.i.)

**Brush/roller****Recommended thinner**

THINNER 91-92

**Volume of thinner**

0 – 5%

**Cleaning solvent**

THINNER 90-53

**ADDITIONAL DATA**

Spreading rate and film thickness	
DFT	Theoretical spreading rate
60 µm (2.4 mils)	11.7 m <sup>2</sup> /l (468 ft <sup>2</sup> /US gal)
100 µm (4.0 mils)	7.0 m <sup>2</sup> /l (281 ft <sup>2</sup> /US gal)

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## Overcoating interval for DFT up to 60 µm (2.4 mils)

Overcoating with...	Interval	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
subsequent coating	Minimum	6 hours	3 hours	2 hours	1 hour
	Maximum	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
- An interval of several months can be allowed under clean interior exposure conditions
- In clean exterior conditions, a maximum interval of 3 months can be tolerated, but in industrial or marine conditions this interval should be reduced to the practical minimum
- Before overcoating visible surface contamination must be removed by high-pressure water cleaning, sweep blasting or mechanical cleaning

## Curing time for DFT up to 60 µm (2.4 mils)

Substrate temperature	Dry to touch	Dry to handle	Full cure
10°C (50°F)	6 hours	8 hours	20 days
15°C (59°F)	4 hours	5 hours	10 days
20°C (68°F)	3 hours	4 hours	7 days
30°C (86°F)	1.5 hours	2 hours	5 days

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

## 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.



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## 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
• SAFE WORKING IN CONFINED SPACES	INFORMATION SHEET	1433
• DIRECTIVES FOR VENTILATION PRACTICE	INFORMATION SHEET	1434
• CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490

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