



# New Guard Coatings Group

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This information is not exhaustive and it is the user's responsibility to ensure that this data sheet is the most current by contacting their local New Guard Coatings Group branch prior to using the coating/product.

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NORTH • SOUTH EAST • MIDLANDS • NORTH WEST • HULL • SCOTLAND

# 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	
<b>Number of components</b>	Two
<b>Mass density</b>	3.0 kg/l (25.0 lb/US gal)
<b>Volume solids</b>	70 ± 2%
<b>VOC (Supplied)</b>	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)
<b>Recommended dry film thickness</b>	50 - 100 µm (2.0 - 4.0 mils) depending on system
<b>Theoretical spreading rate</b>	11.7 m <sup>2</sup> /l for 60 µm (468 ft <sup>2</sup> /US gal for 2.4 mils)
<b>Dry to touch</b>	3 hours
<b>Overcoating Interval</b>	Minimum: 3 hours See overcoating tables
<b>Full cure after</b>	7 days
<b>Shelf life</b>	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)
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### 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)
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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 (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

8 hours at 20°C (68°F)

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### 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)

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

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**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.

**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

**WARRANTY**

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