



# New Guard Coatings Group

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# SIGMACOVER™ 630

## DESCRIPTION

Two-component, surface-tolerant, high-build polyamine-cured epoxy primer/coating

## PRINCIPAL CHARACTERISTICS

- Surface tolerant coating for lower grade of steel preparation
- Particularly suited as maintenance coating for dry cargo holds, decks and hulls
- General-purpose epoxy buildcoat or finish in protective coating systems, for steel and concrete structures exposed to atmospheric land or marine conditions
- Compatible with various aged coatings
- Overcoatable with most types of coatings
- Excellent corrosion resistance
- Resistant to splash and spillage of a wide range of chemicals
- Good flexibility

## COLOR AND GLOSS LEVEL

- Green, gray, redbrown, black, aluminum
- Semi-gloss

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.4 kg/l (11.7 lb/US gal)
Volume solids	83 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 166.0 g/kg max. 232.0 g/l (approx. 1.9 lb/US gal)
Recommended dry film thickness	60 - 200 µm (2.4 - 8.0 mils) depending on requirements
Theoretical spreading rate	6.6 m <sup>2</sup> /l for 125 µm (266 ft <sup>2</sup> /US gal for 5.0 mils) 4.2 m <sup>2</sup> /l for 200 µm (166 ft <sup>2</sup> /US gal for 8.0 mils)
Dry to touch	6 hours
Overcoating Interval	Minimum: 9 hours See overcoating tables
Full cure after	7 days
Shelf life	Base: at least 12 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

### Atmospheric exposure conditions

- Steel; blast cleaned to ISO-Sa2½, for excellent corrosion protection
  - Steel; blast cleaned to ISO-Sa2, blasting profile 40 – 70 µm (1.6 – 2.8 mils) or power tool cleaned to ISO-St2 for good corrosion protection
  - Shop primed steel; pretreated to SPSS-Pt3
  - Coated steel; hydrojetted to VIS WJ2/3L
  - Existing sound coating systems; sufficiently roughened, dry and cleaned
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### Immersion in water with cathodic protection

- Steel; blast cleaned to ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)
  - Steel with approved zinc silicate shop primer; sweep blasted to SPSS-Ss or power tool cleaned to SPSS-Pt3
  - First coat SIGMACOVER 630 aluminum
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### Substrate temperature

- Substrate temperature during application and curing should be above 10°C (50°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 83:17

- 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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### Induction time

None

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### Pot life

2 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

5 - 10%, depending on required thickness and application conditions

### Nozzle orifice

1.8 - 2.0 mm (approx. 0.070 - 0.079 in)

### Nozzle pressure

0.3 - 0.4 MPa (approx. 3 - 4 bar; 44 - 58 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. 0.48 - 0.53 mm (0.019 - 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

### Volume of thinner

0 - 5%

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## ADDITIONAL DATA

Spreading rate and film thickness for brush/roller	
DFT	Theoretical spreading rate
60 µm (2.4 mils)	13.8 m <sup>2</sup> /l (555 ft <sup>2</sup> /US gal)
100 µm (4.0 mils)	8.3 m <sup>2</sup> /l (333 ft <sup>2</sup> /US gal)

Note: Maximum DFT when brushing: 100 µm (4.0 mils)

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## Spreading rate and film thickness for airless spray

DFT	Theoretical spreading rate
125 µm (5.0 mils)	6.6 m <sup>2</sup> /l (266 ft <sup>2</sup> /US gal)
200 µm (8.0 mils)	4.2 m <sup>2</sup> /l (166 ft <sup>2</sup> /US gal)

## Overcoating interval for DFT up to 150 µm (6.0 mils)

Overcoating with...	Interval	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
itself	Minimum	20 hours	9 hours	5 hours	3 hours
	Maximum	12 months	9 months	6 months	3 months
various two-component epoxy coatings	Minimum	20 hours	9 hours	5 hours	3 hours
	Maximum	6 months	3 months	1 month	1 month

Notes:

- Surface should be dry and free from any contamination
- For polyurethane paints the minimum overcoating time should be raised with 100%

## Overcoating interval for DFT up to 150 µm (6.0 mils)

Overcoating with...	Interval	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
various alkyds	Minimum	24 hours	16 hours	8 hours	5 hours
	Maximum	21 days	10 days	7 days	3 days

Notes:

- After exceeding of the maximum interval, glossy finishes require a corresponding undercoat
- Surface should be dry and free from any contamination
- Best intercoat adhesion occurs when the subsequent coat is applied before the preceding coat is fully cured
- If this time is exceeded it may be necessary to roughen the surface

## Curing time for DFT up to 150 µm (6.0 mils)

Substrate temperature	Dry to touch	Dry to handle	Full cure
10°C (50°F)	14 hours	20 hours	15 days
20°C (68°F)	6 hours	9 hours	7 days
30°C (86°F)	4 hours	5 hours	4 days
40°C (104°F)	2 hours	3 hours	48 hours

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



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Pot life (at application viscosity)	
Mixed product temperature	Pot life
15°C (59°F)	3 hours
20°C (68°F)	2 hours
30°C (86°F)	1 hour
40°C (104°F)	30 minutes

## 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

• CONVERSION TABLES	INFORMATION SHEET	1410
• 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
• SPECIFICATION FOR MINERAL ABRASIVES	INFORMATION SHEET	1491
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

## WARRANTY

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