



# 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.

[www.newguardcoatings.com](http://www.newguardcoatings.com)

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

# SIGMAFAST™ 210

## DESCRIPTION

Two-component, high-build zinc phosphate polyurethane primer/finish

## PRINCIPAL CHARACTERISTICS

- Specially designed for in-shop application
- Fast-curing
- Easy application by airless spray
- Good color and gloss retention
- Good adhesion to steel and galvanized steel
- Unlimited recoatable
- Cures at temperatures down to -5°C (23°F)

## COLOR AND GLOSS LEVEL

- A wide range of colors is available through PPG colornet tinting system
- Semi-gloss

## BASIC DATA AT 20°C (68°F)

Data for mixed product (white)	
Number of components	Two
Mass density	1.4 kg/l (11.7 lb/US gal)
Volume solids	55 ± 2%
VOC (Supplied)	Directive 2010/75/EU, SED: max. 270.0 g/kg max. 383.0 g/l (approx. 3.2 lb/US gal)
Recommended dry film thickness	80 - 120 µm (3.1 - 4.7 mils) depending on system
Theoretical spreading rate	6.9 m <sup>2</sup> /l for 80 µm (285 ft <sup>2</sup> /US gal for 3.1 mils) 4.6 m <sup>2</sup> /l for 120 µm (188 ft <sup>2</sup> /US gal for 4.7 mils)
Dry to touch	1 hour
Overcoating Interval	Minimum: 4 hours Maximum: Unlimited
Full cure after	4 days
Shelf life	Base: at least 36 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

### Notes:

- See ADDITIONAL DATA - Overcoating intervals
- See ADDITIONAL DATA - Curing time

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## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

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

- Surface must be dry and free from any contamination
  - Surface should be sufficiently roughened (e.g. sandpapering, sweep blasting)
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### Substrate temperature and application conditions

- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point
  - Substrate temperature during application and curing down to -5°C (23°F) is acceptable; provided the substrate is free from ice and dry
  - Relative humidity during application and curing should not exceed 85%
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## INSTRUCTIONS FOR USE

### Mixing ratio by volume: base to hardener 88:12

- The temperature of the mixed base and hardener should be above 10°C (50°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

5 hours at 20°C (68°F)

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### Air spray

#### **Recommended thinner**

THINNER 21-06

#### **Volume of thinner**

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

#### **Nozzle orifice**

1.0 - 1.5 mm (approx. 0.040 - 0.060 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 21-06

### Volume of thinner

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

### Nozzle orifice

Approx. 0.46 mm (0.018 in)

### Nozzle pressure

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

## Brush/roller

### Recommended thinner

THINNER 21-06

### Volume of thinner

0 - 5%

## Cleaning solvent

THINNER 90-53

## ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
80 µm (3.1 mils)	6.9 m <sup>2</sup> /l (285 ft <sup>2</sup> /US gal)
120 µm (4.7 mils)	4.6 m <sup>2</sup> /l (188 ft <sup>2</sup> /US gal)

Overcoating interval for DFT up to 120 µm (4.7 mils)						
Overcoating with...	Interval	-5°C (23°F)	0°C (32°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)
itself and two-component polyurethane finishes	Minimum	24 hours	16 hours	6 hours	4 hours	2 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

Note: Surface should be dry and free from any contamination

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Curing time for DFT up to 120 µm (4.7 mils)			
Substrate temperature	Dry to touch	Dry to handle	Full cure
-5°C (23°F)	8 hours	24 hours	15 days
0°C (32°F)	5 hours	16 hours	11 days
5°C (41°F)	2.5 hours	9 hours	7 days
10°C (50°F)	2 hours	4 hours	5 days
20°C (68°F)	1 hour	3 hours	4 days
30°C (86°F)	45 minutes	2 hours	3 days

#### Notes:

- Adequate ventilation must be maintained during application and curing
- Premature exposure to early condensation and rain may cause color and gloss change

Pot life (at application viscosity)	
Mixed product temperature	Pot life
10°C (50°F)	7 hours
20°C (68°F)	5 hours
30°C (86°F)	2 hours

## 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
- Contains a toxic polyisocyanate curing agent

## 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
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650



# SIGMAFAST™ 210

## WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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