

# SIGMAFAST 210

4 pages

 March 2011  
 Revision of December 2010

<b>DESCRIPTION</b>	two component high build zinc phosphate polyurethane primer/finish
<b>PRINCIPAL CHARACTERISTICS</b>	<ul style="list-style-type: none"> <li>- fast curing</li> <li>- specially designed for in-shop application</li> <li>- easy application by airless spray</li> <li>- unlimited recoatable</li> <li>- good adhesion to steel and galvanised steel</li> <li>- good resistance to atmospheric exposure</li> <li>- good colour retention</li> <li>- non-chalking, non-yellowing</li> <li>- cures at temperatures down to -5°C</li> </ul>
<b>COLOURS AND GLOSS</b>	a wide range of colours available by PPG colornet tinting system - semigloss
<b>BASIC DATA AT 20°C</b>	(1 g/cm <sup>3</sup> = 8.25 lb/US gal; 1 m <sup>2</sup> /l = 40.7 ft <sup>2</sup> /US gal) (data for white, for mixed product)
Mass density	1.4 g/cm <sup>3</sup>
Volume solids	55 ± 2%
VOC (supplied)	max. 270 g/kg (Directive 1999/13/EC, SED) max. 383 g/l (approx. 3.2 lb/gal)
Recommended dry film thickness	80 - 120 µm depending on system
Theoretical spreading rate	6.9 m <sup>2</sup> /l for 80 µm, 4.6 m <sup>2</sup> /l for 120 µm
Touch dry after	1 hour
Overcoating interval	min. 4 hours * max. unlimited
Full cure after	4 days *
	(data for components)
Shelf life (cool and dry place)	at least 24 months * see additional data
<b>RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES</b>	<ul style="list-style-type: none"> <li>- steel; blast cleaned to ISO-Sa2½, blasting profile 40 - 70 µm</li> <li>- galvanised steel; dry and free from any contamination and roughened (e.g. sandpapering, sweepblasting)</li> <li>- during application and curing a substrate temperature down to -5°C is acceptable provided the substrate is dry and free from ice</li> <li>- substrate temperature should be at least 3°C above dew point</li> <li>- maximum relative humidity during application and curing is 85%</li> <li>- premature exposure to early condensation and rain may cause colour and gloss change</li> </ul>

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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 preferably be above 10°C, otherwise extra solvent may be required to obtain application viscosity
- too much solvent results in reduced sag resistance and slower cure
- thinner should be added after mixing the components

Induction time

none

Pot life

5 hours at 20°C \*  
\* see additional data

## AIRLESS SPRAY

Recommended thinner

Thinner 21-06

Volume of thinner

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

Nozzle orifice

approx. 0.45 mm (= 0.018 in)

Nozzle pressure

15 MPa (= approx. 150 bar; 2130 p.s.i.)

## AIR SPRAY

Recommended thinner

Thinner 21-06

Volume of thinner

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

Nozzle orifice

1 - 1.5 mm

Nozzle pressure

0.3 - 0.4 MPa (= approx. 3 - 4 bar; 43 - 57 p.s.i.)

## BRUSH/ROLLER

Recommended thinner

Thinner 21-06

Volume of thinner

0 - 5%

## CLEANING SOLVENT

Thinner 90-53

## SAFETY PRECAUTIONS

for paint and recommended thinners see safety 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 vapour as well as contact between the wet paint and exposed skin or eyes

## ADDITIONAL DATA

### Film thickness and spreading rate

theoretical spreading rate m <sup>2</sup> /l	6.9	4.6
dft in µm	80	120

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with itself and two component polyurethane finishes

**Overcoating table for SigmaFast 210 for dft up to 120 µm**

substrate temperature	-5°C	0°C	10°C	20°C	30°C
minimum interval	24 hours	16 hours	6 hours	4 hours	2 hours
maximum interval	unlimited				

- surface should be dry and free from any contamination

**Curing table**

substrate temperature	dry to handle	full cure
-5°C	24 hours	15 days
0°C	16 hours	11 days
10°C	4 hours	5 days
20°C	3 hours	4 days
30°C	2 hours	3 days

- adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)
- premature exposure to early condensation and rain may cause colour and gloss change
- to increase the curing speed of SigmaFast 210 the use of SigmaFast 210 accelerator is allowed to a maximum of 5% on volume (set)
- please note that by adding the SigmaFast 210 accelerator the potlife will be reduced, see table below

**Pot life (at application viscosity)**

20°C	5 hours (no SigmaFast 210 accelerator)
20°C	2 hours (2.5% - volume/set)
20°C	1 hour (5.0% - volume/set)

**Worldwide availability**

Whilst it is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis, 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	see information sheet 1411
Safety indications	see information sheet 1430
Safety in confined spaces and health safety	
Explosion hazard - toxic hazard	see information sheet 1431
Safe working in confined spaces	see information sheet 1433
Directives for ventilation practice	see information sheet 1434

## LIMITATION OF LIABILITY

The information in this data sheet is based upon laboratory tests we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the Sigma Coatings products made by PPG Protective & Marine Coatings, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge are reliable. The products and information are designed for users having the requisite knowledge and industrial skills and it is the end-user's responsibility to determine the suitability of the product for its intended use.

PPG Protective & Marine Coatings has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. PPG Protective & Marine Coatings does therefore not accept any liability arising from loss, injury or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise).

The data contained herein are liable to modification as a result of practical experience and continuous product development.

This data sheet replaces and annuls all previous issues and it is therefore the user's responsibility to ensure that this sheet is current prior to using the product.

The English text of this document shall prevail over any translation thereof.

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240785	black	8000002200
240786	black	8000001400
240787	white	7000002200
240788	white	7000001400