



## SIGMACOVER 256

4 pages

January 2011  
Revision of August 2010**DESCRIPTION**

two component high build polyamide cured recoatable zinc phosphate epoxy primer

**PRINCIPAL CHARACTERISTICS**

- general purpose epoxy primer or build coat for steel and concrete structures
- suitable for atmospheric and marine conditions
- can be recoated with various two component and conventional coatings even after long weathering periods
- lead- and chromate free
- excellent rust preventing properties in industrial or coastal atmospheres
- tough, with long term flexibility
- cures even at temperatures down to -10°C
- good adhesion to steel, galvanised steel and aged epoxy coatings
- easy application, both by airless spray and brush
- can be used as epoxy primer/finish (for dry internal areas)

**COLOURS AND GLOSS**

cream, pink (other colours on request) - eggshell

**BASIC DATA AT 20°C**(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 mixed product)

Mass density

1.4 g/cm<sup>3</sup>

Volume solids

63 ± 2%

VOC (supplied)

max. 245 g/kg (Directive 1999/13/EC, SED)

max. 338 g/l (approx. 2.8 lb/gal)

Recommended dry film thickness

75 - 150 µm depending on system

Theoretical spreading rate

6.3 m<sup>2</sup>/l for 100 µm \*

Touch dry after

2 hours

Overcoating interval

min. 3 hours \*

max. unlimited

Full cure after

4 days \*

(data for components)

Shelf life (cool and dry place)

at least 12 months

\* see additional data

**RECOMMENDED  
SUBSTRATE CONDITIONS  
AND TEMPERATURES**

- steel; blast cleaned to ISO-Sa2½, blasting profile 40 - 70 µm
- shop primed steel; pretreated to SPSS-Pt3 / SSPC-SP3
- galvanised steel; free from any contamination and sweep blasted till an even flat appearance (only for internal dry exposure conditions)
- aged suitable coatings; dry and free from any contamination and sufficiently roughened
- during application and curing a substrate temperature down to -10°C is acceptable provided substrate is dry and free from ice
- substrate temperature at least 3°C above dew point
- maximum relative humidity during application and curing is 95%

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## INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 82 : 18

- the temperature of the mixed base and hardener should preferably be above 15°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

20 minutes if applied at temperatures below 10°C  
none above 10°C

Pot life

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

## AIRLESS SPRAY

Recommended thinner

Thinner 91-92

Volume of thinner

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

Nozzle orifice

approx. 0.48 mm (= 0.019 in)

Nozzle pressure

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

## AIR SPRAY

Recommended thinner

Thinner 91-92

Volume of thinner

10 - 15%, depending on required thickness and application conditions

Nozzle orifice

1.5 - 3 mm

Nozzle pressure

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

## BRUSH/ROLLER

Recommended thinner

Thinner 91-92

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	8.4	6.3	4.2
dft in µm	75	100	150

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### Overcoating table for dft up to 100 µm

for SigmaCover 256, SigmaCover 435, SigmaCover 456, SigmaCover 410

substrate temperature	-5°C	5°C	10°C	20°C	30°C	40°C
minimum interval	36 hours	10 hours	4 hours	3 hours	2 hours	2 hours
maximum interval	no limitation, provided that the surface is free from any contamination					

### Overcoating table for dft up to 100 µm

for SigmaDur 520, SigmaDur 550, various chlorinated rubbers, vinyls, acrylates and alkyd paints

substrate temperature	-5°C	5°C	10°C *	20°C	30°C	40°C
minimum interval	72 hours	24 hours	16 hours	8 hours	5 hours	3 hours
maximum interval	no limitation, provided that the surface is free from any contamination					

- finishes require a corresponding undercoat
- SigmaCover 256 should not be overcoated with coal tar epoxy coatings

### Curing table for dft up to 100 µm

substrate temperature	dry to handle	full cure
-10°C	24 - 48 hours	20 days
-5°C	24 - 30 hours	14 days
0°C	18 - 24 hours	10 days
5°C	18 hours	8 days
10°C	12 hours	6 days
15°C	8 hours	5 days
20°C	6 hours	4 days
30°C	4 hours	3 days
40°C	3 hours	2 days

- adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)

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**Pot life (at application viscosity)**

10°C	16 hours
15°C	10 hours
20°C	8 hours
30°C	5 hours
35°C	4 hours

**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.

**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
Cleaning of steel and removal of rust	see information sheet 1490

**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.

	PDS	7412
179630	cream	3012002200
179635	pink	6007002200