



SIGMACOVER 256

5 pages

June 2012
Revision of January 2011**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/cm³ = 8.35 lb/US gal; 1 m²/l = 40.7 ft²/US gal)
(data for mixed product)

Mass density	1.4 g/cm ³
Volume solids	63% ± 2%
VOC (Directive 1999/13/EC, SED)	max. 245 g/kg (Directive 1999/13/EC, SED)
VOC (UK PG 6/23(92) appendix 3)	max. 338 g/l (approx. 2.8 lb/gal) (UK PG 6/23(92) Appendix 3)
Recommended dry film thickness	75 - 150 µm depending on system
Theoretical spreading rate	6.3 m ² /l for 100 µm *
Touch dry after	2 hours at 20 °C
Overcoating interval	min. 3 hours * max. unlimited
Full cure after	4 days * at 20 °C
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%

SIGMACOVER 256

June 2012

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
- Pot life
8 hours at 20 °C *

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; 44 - 58 p.s.i.)

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; 2176 p.s.i.)

BRUSH/ROLLER

Recommended thinner Thinner 91-92
 Volume of thinner 0 - 5%

CLEANING SOLVENT

Thinner 90-53

Film thickness and spreading rate

theoretical spreading rate m ² /l	8.4	6.3	4.2
dft in µm	75	100	150

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					

SIGMACOVER 256

June 2012

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

Overcoating table for dft up to 100 µm

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

Curing table for dft up to 100 µm

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

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

SIGMACOVER 256

June 2012

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 Sigma 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.

Reference

Conversion labels	see information sheet 1410
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
Specification for mineral abrasives	see information sheet 1491
Relative humidity - substrate temperature - air temperature	see information sheet 1650

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

SIGMACOVER 256

June 2012

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

	PDS	7412
179630	cream	3012002200
179635	pink	6007002200