# SIGMACOVER 256

Globally Available

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/cm³ = 8.25 lb/US gal; 1 m²/l = 40.7 ft²/US gal)
(data for mixed product)

| | |
|---|---|
| Mass density | 1.4 g/cm³ |
| Volume solids | 63 ± 2% |
| VOC (supplied) | max. 245 g/kg (Directive 1999/13/EC, SED)<br>max. 338 g/l (approx. 2.8 lb/gal) |
| Recommended dry film thickness | 75 - 150 µm depending on system |
| Theoretical spreading rate | 6.3 m²/l for 100 µm * |
| Touch dry after | 2 hours |
| Overcoating interval | min. 3 hours *<br>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 m²/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 |



| | PDS | 7412 |
|---|---|---|
| 179630 | cream | 3012002200 |
| 179635 | pink | 6007002200 |