

SIGMACOVER™ 256

DESCRIPTION

Two-component, high-build, polyamide-cured recoatable zinc phosphate epoxy primer

PRINCIPAL CHARACTERISTICS

- General-purpose epoxy primer or buildcoat in protective coating systems, for steel and concrete structures in atmospheric exposure
- Suitable for atmospheric industrial and marine applications
- 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 (14°F)
- Good adhesion to steel, galvanized steel and aged epoxy coatings
- Easy application, both by airless spray and brush
- Can be used as epoxy primer/finish (for dry internal areas)

COLOR AND GLOSS LEVEL

- Cream (other colors available on request)
- Eggshell

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.4 kg/l (11.7 lb/US gal)
Volume solids	63 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 245.0 g/kg UK PG 6/23(92) Appendix 3: max. 338.0 g/l (approx. 2.8 lb/US gal)
Recommended dry film thickness	75 - 150 µm (3.0 - 6.0 mils) depending on system
Theoretical spreading rate	6.3 m ² /l for 100 µm (253 ft ² /US gal for 4.0 mils)
Dry to touch	2 hours
Overcoating Interval	Minimum: 3 hours Maximum: Unlimited
Full cure after	4 days
Shelf life	Base: at least 24 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

Notes:

- See ADDITIONAL DATA – Spreading rate and film thickness
- 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)
 - Shop primed steel; pretreated to SPSS-Pt3 / SSPC-SP3
 - Galvanized steel must be sweep blasted until an even flat appearance (only for internal dry exposure conditions)
 - Aged suitable coating must be dry and free from any contamination
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Substrate temperature

- Substrate temperature during application and curing down to -10°C (14°F) is acceptable; provided the substrate is free from ice and dry
 - Substrate temperature during application should be at least 3°C (5°F) above dew point
 - Relative humidity during application and curing should not exceed 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 (59°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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Pot life

8 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

Air spray

Recommended thinner

THINNER 91-92

Volume of thinner

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

Nozzle orifice

1.5 – 3.0 mm (approx. 0.060 – 0.110 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 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

15.0 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

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
75 µm (3.0 mils)	8.4 m ² /l (337 ft ² /US gal)
100 µm (4.0 mils)	6.3 m ² /l (253 ft ² /US gal)
150 µm (6.0 mils)	4.2 m ² /l (168 ft ² /US gal)

Overcoating interval for DFT up to 100 µm (4.0 mils)							
Overcoating with...	Interval	-5°C (23°F)	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
SIGMACOVER 256, SIGMACOVER 435, SIGMACOVER 456 and SIGMACOVER 410	Minimum	36 hours	10 hours	4 hours	3 hours	2 hours	2 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

Note: Maximum interval is only unlimited when the surface is free from any contamination



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Overcoating interval for DFT up to 100 µm (4.0 mils)							
Overcoating with...	Interval	-5°C (23°F)	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
SIGMADUR 520, SIGMADUR 550, various chlorinated rubbers, vinyls, acrylates and alkyd paints	Minimum	3 days	24 hours	16 hours	8 hours	5 hours	3 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

Notes:

- Maximum interval is only unlimited when the surface is free from any contamination
- SIGMACOVER 256 should not be overcoated with coal tar epoxy coatings

Curing time for DFT up to 100 µm (4.0 mils)		
Substrate temperature	Dry to handle	Full cure
-10°C (14°F)	24 hours - 48 hours	20 days
-5°C (23°F)	24 hours - 30 hours	14 days
0°C (32°F)	18 hours - 24 hours	10 days
5°C (41°F)	18 hours	8 days
10°C (50°F)	12 hours	6 days
15°C (59°F)	8 hours	5 days
20°C (68°F)	6 hours	4 days
30°C (86°F)	4 hours	3 days
40°C (104°F)	3 hours	48 hours

Note: adequate ventilation must be maintained during application and curing (please refer to sheet 1433 and 1434)

Pot life (at application viscosity)	
Mixed product temperature	Pot life
10°C (50°F)	16 hours
15°C (59°F)	10 hours
20°C (68°F)	8 hours
30°C (86°F)	5 hours
35°C (95°F)	4 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



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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
• SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431
• SAFE WORKING IN CONFINED SPACES	INFORMATION SHEET	1433
• DIRECTIVES FOR VENTILATION PRACTICE	INFORMATION SHEET	1434
• CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490
• SPECIFICATION FOR MINERAL ABRASIVES	INFORMATION SHEET	1491
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

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