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)
- Low sheen

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 2010/75/EU, 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:

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- See ADDITIONAL DATA – Spreading rate and film thickness
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time

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

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%

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 4.56:1

- 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

Pot life

8 hours at 20°C (68°F)

Note:

- See ADDITIONAL DATA – Pot life

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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.)

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

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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 Maximum	36 hours Unlimited	10 hours Unlimited	4 hours Unlimited	3 hours Unlimited	2 hours Unlimited	2 hours Unlimited
SIGMADUR 520, SIGMADUR 550, various chlorinated rubbers, vinyls, acrylates and alkyd paints	Minimum Maximum	3 days Unlimited	24 hours Unlimited	16 hours Unlimited	8 hours Unlimited	5 hours Unlimited	3 hours Unlimited

Notes:

- This product has an unlimited maximum overcoating interval provided the surface is free from chalking and other contamination, in which case it should be cleaned and roughened up to ensure good adhesion of subsequent coat
- SIGMACOVER 256 should not be overcoated with coal tar epoxy coatings

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

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

- See Safety Data Sheet and product label for complete safety and precaution requirements
- 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

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & 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

- Information sheet | Explanation of product data sheets

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