

# PPG SIGMACOVER™ 280 LT

## DESCRIPTION

Universal epoxy anticorrosive primer, based upon pure epoxy technology

## PRINCIPAL CHARACTERISTICS

- General-purpose epoxy primer in protective coating systems for steel and non-ferrous metals
- Excellent adhesion to steel, shop primer, galvanized steel and non-ferrous metals
- Suitable as sealer or tie-coat at DFT 25 - 40 µm (1.0 - 1.6 mils)
- Suitable for immersion service
- Suitable for touching up of weld seams and damages of epoxy coatings during construction
- Compatible with well-designed, controlled cathodic protection systems
- Cures at temperatures down to -10°C (14°F)

## COLOR AND GLOSS LEVEL

- Yellow/green
- Low sheen

Note:

- The addition of a UV stable topcoat should be considered when using epoxy coatings in cosmetic areas

## BASIC DATA AT 10°C (50°F)

Data for mixed product	
Number of components	Two
Mass density	1.4 kg/l (11.7 lb/US gal)
Volume solids	57 ± 2%
VOC (Supplied)	Directive 2010/75/EU, SED: max. 332.0 g/kg UK PG 6/23(92) Appendix 3: max. 438.0 g/l (approx. 3.7 lb/US gal)
Recommended dry film thickness	50 - 100 µm (2.0 - 4.0 mils) depending on system
Theoretical spreading rate	11.4 m²/l for 50 µm (457 ft²/US gal for 2.0 mils) 5.7 m²/l for 100 µm (229 ft²/US gal for 4.0 mils)
Dry to touch	3 hours
Overcoating Interval	Minimum: 3 hours
Full cure after	7 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

- Apply this product to the specified thickness as soon as possible after the surface is prepared
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### Atmospheric exposure conditions

- Steel; pretreated preferably to ISO Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils) or according to ISO St3
  - Shop primed steel; pretreated to SPSS Pt3
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### Galvanized steel

- The surface must be properly prepared, dry, clean and free of any contamination
  - The surface should be sufficiently roughened by sweep blasting to achieve a uniform matt appearance
  - Sweep blast in accordance with the SSPC SP16 guidelines
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### Stainless steel

- The surface must be properly prepared, dry, clean and free of any contamination
  - The surface should be sufficiently roughened by sweep blasting with inert non-metallic abrasives
  - Sweep blast in accordance with the SSPC SP16 guidelines
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### Thermal Sprayed Metallization (TSM)

- Surface must be dry and free from any contamination
  - The mist coat / full coat technique is required. See mist coat thinning recommendation in the Instructions For Use part below
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### Concrete / Masonry

- Dried for at least 28 days in good ventilation conditions
  - Moisture content should not exceed 4.5%
  - Concrete must be sound, dry, free from laitance and any contamination
  - Existing pipelines may have to be cleaned first by scraper pigs and solvents
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### Immersion exposure

- Steel or steel with not approved zinc silicate shop primer; blast cleaned to ISO Sa2½, blasting profile 30 – 75 µm (1.2 – 3.0 mils)
  - Existing pipelines may have to be cleaned first by scraper pigs and solvents
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## **Substrate temperature and application conditions**

- Substrate temperature during application and curing should be between -10°C (14°F) and 15°C (59°F)
- Substrate temperature during application and curing should be at least 3°C (37°F) above dew point
- Ambient temperature during application at -10°C (14°F) is acceptable; however curing to hardness takes longer and complete cure will be reached when the temperature increases
- Relative humidity during application should not exceed 85%

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## **INSTRUCTIONS FOR USE**

### **Mixing ratio by volume: base to hardener 4:1**

- The temperature of the mixed base and hardener should be above 10°C (50°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 10°C (50°F)

Note:

- See ADDITIONAL DATA – Pot life

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### **Air spray**

#### **Recommended thinner**

THINNER 91-92

#### **Volume of thinner**

0 - 10%, depending on required thickness and application conditions

#### **Nozzle orifice**

1.5 – 2.0 mm (approx. 0.060 – 0.079 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**

0 - 10%, depending on required thickness and application conditions

### **Nozzle orifice**

Approx. 0.46 mm (0.018 in)

### **Nozzle pressure**

15.0 MPa (approx. 150 bar; 2176 p.s.i.)

Note:

- Volume of thinner up to 30% for sealer or tie-coat application at DFT range 25 - 40 µm (1.0 - 1.6 mils)

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## **Brush/roller**

### **Recommended thinner**

No extra thinner is necessary

### **Volume of thinner**

Up to 5% THINNER 91-92 can be added if desired

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## **Cleaning solvent**

- THINNER 90-53

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## **ADDITIONAL DATA**

Spreading rate and film thickness	
DFT	Theoretical spreading rate
50 µm (2.0 mils)	11.4 m²/l (457 ft²/US gal)
75 µm (3.0 mils)	7.6 m²/l (305 ft²/US gal)
100 µm (4.0 mils)	5.7 m²/l (229 ft²/US gal)

Note:

- Maximum DFT when brushing: 50 µm (2.0 mils)
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Overcoating interval for DFT up to 75 µm (3.0 mils)						
Overcoating with...	Interval	-5°C (23°F)	0°C (32°F)	5°C (41°F)	10°C (50°F)	15°C (59°F)
itself and various two-pack epoxy coatings	Minimum	16 hours	8 hours	4 hours	3 hours	2 hours
	Maximum	3 months	3 months	2 months	2 months	1 month
polyurethane topcoat	Minimum	24 hours	16 hours	6 hours	4 hours	3 hours
	Maximum	3 months	3 months	2 months	2 months	1 month

Note:

- Surface should be dry and free from any contamination

Curing time for DFT up to 75 µm (3.0 mils)			
Substrate temperature	Dry to touch	Dry to handle	Full cure
-10°C (14°F)	20 hours	32 hours	21 days
-5°C (23°F)	10 hours	16 hours	14 days
5°C (41°F)	5 hours	6 hours	9 days
10°C (50°F)	3 hours	4 hours	7 days
15°C (59°F)	2 hours	3 hours	5 days

Note:

- Adequate ventilation must be maintained during application and curing

Pot life (at application viscosity)	
Mixed product temperature	Pot life
5°C (41°F)	10 hours
10°C (50°F)	8 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.



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## REFERENCES

- Information sheet | Explanation of product data sheets

## WARRANTY

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