

# SIGMACOVER™ 620

## DESCRIPTION

Two-component, surface-tolerant, high-build, polyamide-cured epoxy primer/coating

## PRINCIPAL CHARACTERISTICS

- Excellent corrosion resistance
- Good flexibility
- Surface tolerant coating for lower grade of steel preparation
- Good drying and curing property
- Easy application by different application methods such as airless spray, brush etc.
- Low temperature version available if required

## COLOR AND GLOSS LEVEL

- Gray, off-white (other colors available on request)
- Aluminum colors (dark gray, light gray)
- Eggshell

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.5 kg/l (12.5 lb/US gal)
Volume solids	80 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 150.0 g/kg UK PG 6/23(92) Appendix 3: max. 225.0 g/l (approx. 1.9 lb/US gal)
Recommended dry film thickness	75 - 250 µm (3.0 - 10.0 mils) depending on system
Theoretical spreading rate	6.4 m <sup>2</sup> /l for 125 µm (257 ft <sup>2</sup> /US gal for 5.0 mils)
Dry to touch	3 hours
Overcoating Interval	Minimum: 8 hours Maximum: 6 months
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

# SIGMACOVER™ 620

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Atmospheric exposure conditions

- Steel; blast cleaned to ISO-Sa2½ for excellent corrosion protection
- Steel; blast cleaned to ISO-Sa2 or power tool cleaned to ISO-St2 for good corrosion protection
- Shop primed steel; pretreated to SPSS-Pt2
- Galvanized steel; sweep blasted to roughen the surface and to remove any zinc salts which might be present
- Stainless steel; degreased and sweep blast (SSPC SP-16) cleaned to roughness of 40 – 70 µm (1.5 – 2.8 mils) with non-ferrous abrasive

### Immersion exposure

- Steel; blast cleaned to ISO-Sa2½
- Steel with approved zinc silicate shop primer; sweep blasted to SPSS-Ss or power tool cleaned to SPSS-Pt3

### Substrate temperature

- Substrate temperature during application and curing should be above 5°C (41°F)
- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point

## INSTRUCTIONS FOR USE

### Mixing ratio by volume: base to hardener 80:20 (4:1)

- 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

### Induction time

Mixed product induction time	
Mixed product temperature	Induction time
Above 10°C (50°F)	None

### Pot life

4 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life



# SIGMACOVER™ 620

## Airless spray

### **Recommended thinner**

THINNER 91-92

### **Volume of thinner**

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

### **Nozzle orifice**

Approx. 0.46 – 0.53 mm (0.018 – 0.021 in)

### **Nozzle pressure**

20.0 - 25.0 MPa (approx. 200 - 250 bar; 2901 - 3626 p.s.i.)

---

## Brush/roller

- Application by roller will leave roller marking and is suitable for minimum DFT requirements only
- A roller suitable for epoxy application must be used

### **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)	10.7 m <sup>2</sup> /l (428 ft <sup>2</sup> /US gal)
100 µm (4.0 mils)	8.0 m <sup>2</sup> /l (321 ft <sup>2</sup> /US gal)
125 µm (5.0 mils)	6.4 m <sup>2</sup> /l (257 ft <sup>2</sup> /US gal)
150 µm (6.0 mils)	5.3 m <sup>2</sup> /l (214 ft <sup>2</sup> /US gal)
200 µm (8.0 mils)	4.0 m <sup>2</sup> /l (160 ft <sup>2</sup> /US gal)

# SIGMACOVER™ 620

Overcoating interval for DFT up to 125 µm (5.0 mils): Atmospheric exposure						
Overcoating with...	Interval	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
various two-pack epoxy and polyurethane coatings	Minimum	48 hours	24 hours	8 hours	4 hours	2 hours
	Maximum exposed to direct sunshine	3 months	3 months	3 months	3 months	3 months
	Maximum NOT exposed to direct sunshine	6 months	6 months	6 months	6 months	6 months

Note: Surface should be dry and free from any contamination and sufficiently roughened after long exposure

Overcoating interval for DFT up to 125 µm (5.0 mils): Immersion exposure						
Overcoating with...	Interval	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
various two-component epoxy coatings	Max recoat immersion minimum interval	48 hours	24 hours	8 hours	4 hours	2 hours
	Max recoat immersion maximum interval	2 months	2 months	2 months	2 months	2 months

Note: Surface should be dry and free from any contamination and sufficiently roughened after long exposure

Curing time for DFT up to 125 µm (5.0 mils)			
Substrate temperature	Dry to touch	Dry to handle	Full cure
5°C (41°F)	24 hours	48 hours	20 days
10°C (50°F)	12 hours	24 hours	14 days
20°C (68°F)	3 hours	8 hours	7 days
30°C (86°F)	2 hours	6 hours	4 days
40°C (104°F)	1 hour	3 hours	3 days

Note: Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

Pot life (at application viscosity)	
Mixed product temperature	Pot life
10°C (50°F)	10 hours
15°C (59°F)	6 hours
20°C (68°F)	4 hours
30°C (86°F)	2 hours
40°C (104°F)	1 hour



# SIGMACOVER™ 620

## 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

## 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

• 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

## WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

## LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at [www.ppgmc.com](http://www.ppgmc.com). The English text of this sheet shall prevail over any translation thereof.

The PPG logo, and all other PPG marks are property of the PPG group of companies. All other third-party marks are property of their respective owners.

