



# New Guard Coatings Group

A global reputation to protect.

The information herewith is given with the best of New Guard Coatings Group knowledge.

Rights are reserved to change and update the data without notice.

This information is not exhaustive and it is the user's responsibility to ensure that this data sheet is the most current by contacting their local New Guard Coatings Group branch prior to using the coating/product.

[www.newguardcoatings.com](http://www.newguardcoatings.com)

NORTH • SOUTH EAST • MIDLANDS • NORTH WEST • HULL • SCOTLAND

# PPG AQUACOVER™ 400

(SIGMA AQUACOVER™ 400)

## DESCRIPTION

Two-component, polyamine-cured, waterborne epoxy coating

## PRINCIPAL CHARACTERISTICS

- General-purpose epoxy buildcoat in protective coating systems, for steel structures in atmospheric exposure
- Particularly suitable when solvents are not permitted because of health and safety reasons
- Free from lead- and chromate-containing pigments
- Can be overcoated with most dispersion and alkyd paints, and two-component durable finishes
- Easy application by brush/roller and (airless) spray
- Suitable for concrete floors

## COLOR AND GLOSS LEVEL

- Limited color range available
- Semi-gloss

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
<b>Number of components</b>	Two
<b>Mass density</b>	1.3 kg/l (10.8 lb/US gal)
<b>Volume solids</b>	53 ± 2%
<b>VOC (Supplied)</b>	Directive 1999/13/EC, SED: max. 5.0 g/kg max. 6.0 g/l (approx. 0.1 lb/US gal)
<b>Recommended dry film thickness</b>	75 - 100 µm (3.0 - 4.0 mils) depending on system
<b>Theoretical spreading rate</b>	7.1 m <sup>2</sup> /l for 75 µm (283 ft <sup>2</sup> /US gal for 3.0 mils) 5.3 m <sup>2</sup> /l for 100 µm (213 ft <sup>2</sup> /US gal for 4.0 mils)
<b>Dry to touch</b>	1.5 hours
<b>Overcoating Interval</b>	Minimum: 2 hours Maximum: 6 months
<b>Full cure after</b>	4 days
<b>Shelf life</b>	Base: at least 12 months when stored cool and dry Hardener: at least 6 months when stored cool and dry

### Notes:

- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time



# PPG AQUACOVER™ 400

(SIGMA AQUACOVER™ 400)

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

- Steel with suitable primer must be dry and free from any contamination within the recoat times
- Galvanized surfaces are variable and the preferred method of treatment is to lightly sweep blast followed by degreasing and cleaning
- Concrete; surface must be cured, clean, dry and free of desintegrated or chalky materials

### Substrate temperature and application conditions

- Substrate temperature during application and curing should be above 10°C (50°F)
- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point
- Relative humidity during application and curing should not exceed 75%

## INSTRUCTIONS FOR USE

### Mixing ratio by volume: base to hardener 70:30

- Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)
- Must be protected from freezing at all times during storage and/or transport
- Too much water results in reduced sag resistance and slower cure
- 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
- Water should be added after mixing the components

### Induction time

None

### Pot life

3 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

### Airless spray

#### **Recommended thinner**

Tap water

#### **Volume of thinner**

0 - 5%, 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.)



# PPG AQUACOVER™ 400

(SIGMA AQUACOVER™ 400)

## Brush/roller

### **Recommended thinner**

Tap water

### **Volume of thinner**

0 – 5%

## **Cleaning solvent**

The following tables illustrate the cleaning procedure of the spray equipment when changing from spraying with solvent-borne paint to waterborne paints (table 1) and from waterborne paints to solvent-borne paints (table 2)

### Notes:

- Cleaning procedures of the spray equipment
- Pulsator filter and tip filter must be taken out of the equipment and cleaned properly

## **Cleaning procedures**

- Pulsator filter and tip filter must be taken out of the equipment and cleaned properly
- The following tables illustrate the cleaning procedure of the spray equipment when changing from spraying with solvent-borne paint to waterborne paints (table 1) and from waterborne paints to solvent-borne paints (table 2)

**Table 1: Cleaning procedure from solvent-borne to waterborne paints**

Steps	Cleaning text
1st cleaning	THINNER 90-53
2nd cleaning	THINNER 70-05
3rd cleaning	With warm tap water of 30°C (86°F) to 35°C (95°F) after which waterborne paints can be sprayed

**Table 2: Cleaning procedure from waterborne to solvent-borne paints**

Steps	Cleaning text
1st cleaning	Warm tap water of 30°C (86°F) to 35°C (95°F)
2nd cleaning	THINNER 70-05
3rd cleaning	THINNER 90-53

# PPG AQUACOVER™ 400

(SIGMA AQUACOVER™ 400)

## ADDITIONAL DATA

Overcoating interval for DFT up to 100 µm (4.0 mils)					
Overcoating with...	Interval	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
itself	Minimum	3 hours	2 hours	1 hour	45 minutes
	Maximum	6 months	6 months	6 months	6 months
SIGMADUR 520 and SIGMADUR 550	Minimum	24 hours	16 hours	12 hours	8 hours
	Maximum	6 months	6 months	6 months	6 months

Curing time for DFT up to 100 µm (4.0 mils)			
Substrate temperature	Dry to touch	Dry to handle	Full cure
10°C (50°F)	3 hours	18 hours	6 days
20°C (68°F)	1.5 hours	6 hours	4 days
30°C (86°F)	1 hour	5 hours	3 days
40°C (104°F)	45 minutes	4 hours	48 hours

Pot life (at application viscosity)	
Mixed product temperature	Pot life
10°C (50°F)	4 hours
20°C (68°F)	3 hours
30°C (86°F)	2 hours
40°C (104°F)	1 hour

## SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- Although this is a waterborne paint, care should be taken to avoid inhalation of spray mist, 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.



# PPG AQUACOVER™ 400

## (SIGMA AQUACOVER™ 400)

### 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
• SURFACE PREPARATION OF CONCRETE (FLOORS)	INFORMATION SHEET	1496
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

### 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.ppgpmc.com](http://www.ppgpmc.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.

