



# 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

# SIGMACOVER™ 410

## DESCRIPTION

Two-component, high solids, high-build, polyamide cured epoxy coating

## PRINCIPAL CHARACTERISTICS

- General-purpose epoxy buildcoat in protective coating systems, for steel and concrete structures exposed to atmospheric land or marine conditions
- Excellent durability
- Can be recoated with various two-component and conventional coatings, even after long weathering periods
- Easy application by airless spray
- Available in MIO or conventional pigmented grade

## COLOR AND GLOSS LEVEL

- MIO and a selected range of colors
- Flat

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
<b>Number of components</b>	Two
<b>Mass density</b>	1.5 kg/l (12.5 lb/US gal), depending on color MIO: 1.9 kg/l (15.9 lb/US gal)
<b>Volume solids</b>	80 ± 2%
<b>VOC (Supplied)</b>	Directive 1999/13/EC, SED: max. 126.0 g/kg UK PG 6/23(92) Appendix 3: max. 240.0 g/l (approx. 2.0 lb/US gal)
<b>Recommended dry film thickness</b>	75 - 200 µm (3.0 - 8.0 mils) depending on system
<b>Theoretical spreading rate</b>	10.7 m <sup>2</sup> /l for 75 µm (428 ft <sup>2</sup> /US gal for 3.0 mils)
<b>Dry to touch</b>	3 hours
<b>Overcoating Interval</b>	Minimum: 8 hours Maximum: Extended
<b>Full cure after</b>	7 days
<b>Shelf life</b>	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™ 410

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

- Suitable primer must be dry and free from any contamination
- When applied to zinc silicate, a mist coat and full coat technique is required

### 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 paint 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

None

### Pot life

6 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

### Air spray

### Recommended thinner

THINNER 91-92

### Volume of thinner

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

### Nozzle orifice

1.7 – 2.0 mm (approx. 0.070 – 0.079 in)

### Nozzle pressure

0.3 - 0.4 MPa (approx. 3 - 4 bar; 44 - 58 p.s.i.)



# SIGMACOVER™ 410

## Airless spray

### **Recommended thinner**

THINNER 91-92

### **Volume of thinner**

0 - 10%, 30 - 40% when mist coat applied

### **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 brush may show brush marking, due to the thixotropic nature of the paint and is most suitable to small areas, tight angle areas or for stripe coating or touch-up
- 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**

<b>Spreading rate and film thickness</b>	
<b>DFT</b>	<b>Theoretical spreading rate</b>
75 µm (3.0 mils)	10.7 m <sup>2</sup> /l (428 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™ 410

## Overcoating interval for DFT up to 200 µm (8.0 mils)

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	36 hours	24 hours	8 hours	6 hours	4 hours
	Maximum	Extended	Extended	Extended	Extended	Extended

### Notes:

- This product has an unlimited overcoating interval provided the surface is free from chalking and other contaminations
- The optimum intercoat adhesion is obtained when the subsequent coating is applied before the full cure time of the previous coating has elapsed
- In cases of exposure to direct sunlight or when the surface is contaminated it is recommended that the surface be cleaned and roughened to ensure good adhesion of the subsequent coating.

## Curing time for DFT up to 200 µm (8.0 mils)

Substrate temperature	Dry to touch	Dry to handle	Full cure
5°C (41°F)	12 hours	30 hours	20 days
10°C (50°F)	6 hours	24 hours	14 days
15°C (59°F)	4 hours	10 hours	10 days
20°C (68°F)	3 hours	8 hours	7 days
30°C (86°F)	2 hours	6 hours	5 days
40°C (104°F)	1.5 hours	4 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)	12 hours
15°C (59°F)	10 hours
20°C (68°F)	6 hours
25°C (77°F)	4 hours
30°C (86°F)	3 hours
40°C (104°F)	2 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

# SIGMACOVER™ 410

## 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
• CONVERSION TABLES	INFORMATION SHEET	1410
• 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.

