# SIGMACOVER™ 410 / AMERCOAT® 410

## **OVERVIEW**

· Place of origin: Indonesia

Gloss level: Flat

• Dry to touch: 3 hours

• Number of components: 2

· Color: MIO and a selected range of colors

# **PRODUCT DETAIL**

## **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         |   |  |
|--------------------------------|---|--|
| Number of components           | Two   |  |
| Mass density                   | 1.5 kg/l (12.5 lb/US gal), depending on color                     |  |
|                                | MIO: 1.9 kg/l (15.9 lb/US gal)                                    |  |
| Volume solids                  | 80 ± 2%   |  |
| VOC (Supplied)                 | 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) |  |
| Recommended dry film thickness | 75 - 200 μm (3.0 - 8.0 mils) depending on system                  |  |
| Theoretical spreading rate     | 10.7 m²/l for 75 μm (428 ft²/US gal for 3.0 mils)                 |  |
| Dry to touch                   | 3 hours   |  |
| Overcoating Interval           | Minimum: 8 hours  |  |
|                                | Maximum: Extended   |  |
| 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 |

#### Notes:

- 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**

- 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

# **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 thixatropic 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**

| Spreading rate and film thickness |   |  |  |
|-----------------------------------|---|--|--|
| DFT                               | Theoretical spreading rate                          |  |  |
| 75 μm (3.0 mils)                  | 10.7 m²/l (428 ft²/US gal)                          |  |  |
| 150 μm (6.0 mils)                 | 5.3 m²/l (214 ft²/US gal)                           |  |  |
| 200 μm (8.0 mils)                 | 4.0 m <sup>2</sup> /l (160 ft <sup>2</sup> /US gal) |  |  |

| 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                               | Minimum  | 36 hours   | 24 hours    | 8 hours     | 6 hours     | 4 hours      |
| and polyurethane                                     | 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

## **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.