(SIGMA AQUACOVER™ 200)

#### DESCRIPTION

Two-component, polyamine-cured, waterborne epoxy primer

#### **PRINCIPAL CHARACTERISTICS**

- · General-purpose epoxy primer in protective coating systems for steel structures in atmospheric exposure
- · Particularly suitable when solvents are not permitted because of health and safety reasons
- Excellent rust preventing properties in industrial or coastal atmospheres
- Good adhesion to steel and galvanized steel
- 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 application on concrete

#### **COLOR AND GLOSS LEVEL**

- Gray (RAL 7038), buff (RAL 1015)
- Eggshell

#### BASIC DATA AT 20°C (68°F)

| Data for mixed product         |                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------|
| Number of components           | Тwo                                                                                                         |
| Mass density                   | 1.3 kg/l (10.8 lb/US gal)                                                                                   |
| Volume solids                  | 53 ± 2%                                                                                                     |
| VOC (Supplied)                 | Directive 1999/13/EC, SED: max. 5.0 g/kg<br>UK PG 6/23(92) Appendix 3: max. 6.0 g/l (approx. 0.1 lb/US gal) |
| Recommended dry film thickness | 75 - 100 μm (3.0 - 4.0 mils) depending on system                                                            |
| Theoretical spreading rate     | 7.1 m²/l for 75 μm (283 ft²/US gal for 3.0 mils)<br>5.3 m²/l for 100 μm (213 ft²/US gal for 4.0 mils)       |
| Dry to touch                   | 1.5 hours                                                                                                   |
| Overcoating Interval           | Minimum: 2 hours<br>Maximum: 6 months                                                                       |
| Full cure after                | 4 days                                                                                                      |
| Shelf life                     | Base: at least 12 months when stored cool and dry<br>Hardener: at least 6 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**

#### Substrate conditions

- Steel; blast cleaned to ISO-Sa2½, blasting profile 40 70 μm (1.6 2.8 mils) or power tool cleaned to min. ISO-St3
- 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

- 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
- Too much water results in reduced sag resistance and slower cure
- · Water should be added after mixing the components
- 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

#### 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.)

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#### **Brush/roller**

**Recommended thinner** Tap water

#### Volume of thinner

0 - 5%

#### **Cleaning solvent**

Tap water and THINNER 70-05

#### **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 solventborne 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<br>30°C (86°F) to 35°C (95°F)<br>after which waterborne<br>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<br>(86°F) to 35°C (95°F) |  |
| 2nd cleaning                                                        | THINNER 70-05                                   |  |
| 3rd cleaning                                                        | THINNER 90-53                                   |  |

#### **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) |
| PPG AQUACOVER 400                                    | Minimum  | 3 hours     | 2 hours     | 1 hour      | 45 minutes   |
|                                                      | Maximum  | 6 months    | 6 months    | 6 months    | 6 months     |
| SIGMADUR 520 and                                     | Minimum  | 24 hours    | 16 hours    | 12 hours    | 8 hours      |
| SIGMADUR 550                                         | Maximum  | 6 months    | 6 months    | 6 months    | 6 months     |



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| Curing time for DFT up to 100 $ar{Bm}$ (4.0 mils) |              |               |           |
|---------------------------------------------------|--------------|---------------|-----------|
| Substrate temperature                             | Dry to touch | Dry to handle | Full cure |
| 10°C (50°F)                                       | 3 hours      | 16 hours      | 6 days    |
| 20°C (68°F)                                       | 1.5 hours    | 5 hours       | 4 days    |
| 30°C (86°F)                                       | 1 hour       | 4 hours       | 3 days    |
| 40°C (104°F)                                      | 45 minutes   | 3 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.

#### 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 - | INFORMATION SHEET | 1431 |
|   | TOXIC HAZARD                                                    |                   |      |
| • | 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 |
| • | SPECIFICATION FOR MINERAL ABRASIVES                             | INFORMATION SHEET | 1491 |
| • | SURFACE PREPARATION OF CONCRETE (FLOORS)                        | INFORMATION SHEET | 1496 |
| • | RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE     | INFORMATION SHEET | 1650 |
|   |                                                                 |                   |      |



### PPG AQUACOVER™ 200 (SIGMA AQUACOVER™ 200)

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