December 16, 2021 (Revision of February 25, 2021)

SIGMACOVER™ 410 Y

(SIGMACOVER™ 410 ME)

DESCRIPTION

Two-component, high-build, polyamide-cured epoxy primer/buildcoat

PRINCIPAL CHARACTERISTICS

- General-purpose epoxy buildcoat in protective coating systems, for steel and concrete structures exposed to atmospheric land or marine conditions
- Can be applied as a single coat, direct-to-metal for moderately corrosive environments (ISO 12944 C1-C3)
- The alu grey and alu redbrown versions can be applied as a single coat, direct-to-metal for corrosive environments up to C5
- In more agressive environments a full coating system is required
- Good durability
- Available in MIO or conventional pigmented grade

COLOR AND GLOSS LEVEL

- MIO, alu grey, alu redbrown 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	82 ± 2%
VOC (Supplied)	Directive 2010/75/EU, SED: max. 137.0 g/kg UK PG 6/23(92) Appendix 3: max. 220.0 g/l (approx. 1.8 lb/US gal)
Recommended dry film thickness	75 - 200 µm (3.0 - 8.0 mils) depending on system
Theoretical spreading rate	10.9 m^2/l for 75 µm (438 ft^2/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 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 ISO-St3
- Suitable primer must be dry and free from any contamination
- Surface of previous coat should be sufficiently roughened if necessary
- 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.)

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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

Spreading rate and film thickness	
DFT	**Theoretical spreading rate**
75 µm (3.0 mils)	10.9 m^2/l (438 ft^2/US gal)
150 µm (6.0 mils)	5.5 m^2/l (219 ft^2/US gal)
200 µm (8.0 mils)	4.1 m^2/l (164 ft^2/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 and polyurethane coatings	Minimum Maximum	36 hours Extended	24 hours Extended	8 hours Extended	6 hours Extended	4 hours Extended

Notes:

- This product has an unlimited overcoating interval provided the surface is free from chalking and other contaminations
- 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.
- The optimum intercoat adhesion is obtained when the subsequent coating is applied before the full cure time of the previous coating has elapsed

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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.

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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

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