AMERLOCK® 400 C / SIGMACOVER™ 400

DESCRIPTION

Two-component, high solids epoxy coating

PRINCIPAL CHARACTERISTICS

- High performance self priming universal epoxy
- High solids, low VOC
- Surface tolerant and abrasion resistant
- Compatible with prepared, damp surfaces
- Good adhesion on most existing coatings
- Good resistance to splash and spillage of chemicals

COLOR AND GLOSS LEVEL

- Standard primer colors and custom colors
- Semi-gloss

Note:

- Epoxy coatings will characteristically chalk and fade upon exposure to sunlight. Light colors are prone to ambering to some extent in interior or exterior exposures

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.4 kg/l (11.7 lb/US gal)
Volume solids	85 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 114.0 g/kg max. 163.0 g/l (approx. 1.4 lb/US gal) EPA Method 24: 180.0 g/ltr (1.5 lb/USgal)
Temperature resistance (Continuous)	To 120°C (250°F)
Temperature resistance (Intermittent)	To 175°C (350°F)
Recommended dry film thickness	100 - 200 µm (4.0 - 8.0 mils)
Theoretical spreading rate	8.5 m^2/l for 100 µm (341 ft^2/US gal for 4.0 mils)
Dry to touch	6 hours
Overcoating Interval	Minimum: 16 hours See overcoating tables
Shelf life	Base: at least 36 months when stored cool and dry Hardener: at least 36 months when stored cool and dry

Notes:

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- See ADDITIONAL DATA – Spreading rate and film thickness
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time
- Intermittent temperature resistance should be less than 5% of the time, and maximum 24 hours

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Apply this product to the specified thickness as soon as possible after the surface is prepared

Carbon steel

- Steel; blast cleaned to ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils) or power tool cleaned to minimum ISO-St2 for good corrosion protection
- Steel; hydrojetted to VIS WJ2/3L

Concrete / Masonry

- Remove grease, oil and other penetrating contaminants according to ASTM D4258
- Abrade the surface per ASTM D4259 to remove all chalk and surface glaze or laitance. Achieve surface profile - ICRI CSP 3 to 5
- Alternatively, ASTM D4944 (Calcium Carbide Gas method) can be used where moisture content should not exceed 4%

Galvanized steel

- Lightly abrasive blast with a fine abrasive in accordance with SSPC SP-16 guidelines to achieve a profile of 40 - 75 µm (1.5 - 3.0 mils). When light abrasive blasting is not possible, galvanizing can be treated with a suitable zinc phosphate conversion coating
- Galvanizing that has had at least 12 months of exterior weathering may be coated after power washing to remove all contaminants and white rust

Non-ferrous metals and stainless steel

- Remove all rust, dirt, moisture, grease or other contaminants from the surface
- Lightly abrasive blast with a fine abrasive in accordance with SSPC-SP 16 guidelines to achieve a profile of 40 - 100 µm (1.5 - 4.0 mils)

Aged coatings and repairs

- Aged suitable coating must be dry and free from any contamination
- For single-pack coatings, extra precautions are necessary

Substrate temperature

- Substrate temperature during application and curing should be between 5°C (41°F) and 50°C (122°F)
- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point

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INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 1:1

- The paint should be stirred well before use, preferably by means of a mechanical mixer, to ensure homogeneity
- Add hardener to base and continue stirring until homogeneous

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Pot life

2 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

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Airless spray

Recommended thinner

THINNER 91-92

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 - 18.0 MPa (approx. 150 - 180 bar; 2176 - 2611 p.s.i.)

Brush/roller

- Brush: apply evenly using a clean, well-loaded brush
- Application by brush or roller will provide approximately 80 µm (3.1 mils) DFT in a single-coat application

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Cleaning solvent

- THINNER 90-53 or THINNER 21-06

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ADDITIONAL DATA

Spreading rate and film thickness	
DFT	**Theoretical spreading rate**
100 µm (4.0 mils)	8.5 m^2/l (341 ft^2/US gal)
125 µm (5.0 mils)	6.8 m^2/l (273 ft^2/US gal)
200 µm (8.0 mils)	4.3 m^2/l (170 ft^2/US gal)

Overcoating interval for DFT up to 125 µm (5.0 mils)					
Overcoating with...	**Interval**	**10°C (50°F)**	**20°C (68°F)**	**30°C (86°F)**	**40°C (104°F)**
itself and various two-pack epoxy coatings	Minimum Maximum	36 hours 3 months	16 hours 3 months	6 hours 2 months	4 hours 1 month
urethane and PSX	Minimum Maximum	36 hours 1 month	16 hours 1 month	6 hours 14 days	4 hours 7 days

Notes:

- Surface should be dry and free from any contamination
- Alkyd coatings and waterborne acrylic coatings should be applied after the film is dry to handle and not greater than three times dry to handle time
- If maximum recoat time has been exceeded, roughen surfaces
- Maximum recoating time is highly dependent upon actual surface temperature - not simply air temperatures. Sun-exposed or otherwise heated surface will shorten the maximum recoat window

Curing time for DFT up to 125 µm (5.0 mils)			
Substrate temperature	**Dry to touch**	**Dry to handle**	**Full cure**
10°C (50°F)	24 hours	48 hours	21 days
20°C (68°F)	6 hours	20 hours	7 days
30°C (86°F)	3 hours	12 hours	4 days
40°C (104°F)	1 hour	8 hours	3 days

Note:

- Adequate ventilation must be maintained during application and curing

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Pot life (at application viscosity)	
Mixed product temperature	**Pot life**
10°C (50°F)	3 hours
21°C (70°F)	2 hours
32°C (90°F)	1 hour
40°C (104°F)	30 minutes

SAFETY PRECAUTIONS

- See Safety Data Sheet and product label for complete safety and precaution requirements
- 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 & 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

- Information sheet | Explanation of product data sheets

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