

# AMERLOCK® 400 AL / SIGMACOVER™ 400 AL

## DESCRIPTION

Two-component, high solids epoxy coating

## PRINCIPAL CHARACTERISTICS

- Aluminum containing surface tolerant maintenance coating
- Compatibility with a wide range of substrates and surface preparations
- High solids, low VOC
- Can be overcoated with a wide range of topcoats
- Good adhesion on most existing coatings
- Good resistance to splash and spillage of chemicals

## COLOR AND GLOSS LEVEL

- Aluminum
- Semi-gloss

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.3 kg/l (10.8 lb/US gal)
Volume solids	85 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 157.0 g/kg max. 150.0 g/l (approx. 1.3 lb/US gal)
Recommended dry film thickness	125 µm (5.0 mils) per coat
Theoretical spreading rate	6.8 m²/l for 125 µm (273 ft²/US gal for 5.0 mils)
Dry to touch	6 hours
Overcoating Interval	Minimum: 16 hours See overcoating tables
Full cure after	7 days
Shelf life	Base: at least 36 months when stored cool and dry Hardener: at least 36 months when stored cool and dry

### Notes:

- 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, for excellent corrosion protection
- Steel; blast cleaned to ISO-Sa2, blasting profile 40 – 70 µm (1.6 – 2.8 mils) or power tool cleaned to ISO-St2 for good corrosion protection
- Shop primed steel; pretreated to SPSS-Pt3 / SSPC-SP3
- Coated steel; hydrojetted to VIS WJ2/3L
- Existing sound coating systems; sufficiently roughened, dry and cleaned
- For immersion exposure: steel; blast cleaned to ISO-Sa2½

### Substrate temperature and application conditions

- Surface temperature during application should be between 5°C (41°F) and 60°C (140°F)
- Surface temperature during application should be at least 3°C (5°F) above dew point
- Ambient temperature during application and curing should be between 5°C (41°F) and 50°C (122°F)
- Relative humidity during application and curing should not exceed 90%

## INSTRUCTIONS FOR USE

### Mixing ratio by volume: base to hardener 50:50 (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
- The thinner should be added after mixing the two components
- Adding too much thinner results in reduced sag resistance and slower cure

### Pot life

4 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**

1.8 – 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.)



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## Airless spray

### **Recommended thinner**

No extra thinner needed

### **Nozzle orifice**

Approx. 0.48 – 0.53 mm (0.019 – 0.021 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

## Cleaning solvent

THINNER 90-53 or THINNER 90-58

## ADDITIONAL DATA

### Spreading rate and film thickness

DFT	Theoretical spreading rate
125 µm (5.0 mils)	6.8 m <sup>2</sup> /l (273 ft <sup>2</sup> /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	Minimum	24 hours	16 hours	8 hours	4 hours
	Maximum	3 months	3 months	2 months	1 month
polyurethanes	Minimum	36 hours	16 hours	8 hours	4 hours
	Maximum	1 month	1 month	14 days	7 days

Note: An extended recoatable window may be allowable in some circumstances, please contact your PPG representative for more details

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## 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)	16 hours	3 days	21 days
20°C (68°F)	6 hours	24 hours	7 days
30°C (86°F)	4 hours	10 hours	4 days
40°C (104°F)	2 hours	8 hours	3 days

### Notes:

- Adequate ventilation must be maintained during application and curing
- Drying times are dependent on air and steel temperature, applied film thickness, ventilation and other environmental conditions

## Pot life (at application viscosity)

Mixed product temperature	Pot life
10°C (50°F)	6 hours
20°C (68°F)	4 hours
30°C (86°F)	2 hours
40°C (104°F)	1 hour

## SAFETY PRECAUTIONS

- 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.

## 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 – TOXIC HAZARD	INFORMATION SHEET	1431
• CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

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