

SIGMACOVER 300 LT

5 pages

September 2009
Revision of September 2005

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| DESCRIPTION | two component high build polyamine adduct cured coaltar epoxy primer/coating |
| PRINCIPAL CHARACTERISTICS | <ul style="list-style-type: none"> - outstanding sea water resistance (outside hull and ballast tanks) - excellent corrosion resistance - good resistance against chemically polluted water - cures even at temperatures down to -10°C - rapid throughput of work can be maintained even at low temperatures - resistant to well designed/controlled cathodic protection |
| COLOURS AND GLOSS | black, brown - eggshell |
| BASIC DATA AT 10°C | (1 g/cm ³ = 8.25 lb/US gal; 1 m ² /l = 40.7 ft ² /US gal) (data for mixed product) |
| Mass density | 1.5 g/cm ³ |
| Volume solids | 71 ± 2% |
| VOC (supplied) | max. 207 g/kg (Directive 1999/13/EC, SED) max. 305 g/l (approx. 2.5 lb/gal) |
| Recommended dry film thickness | 125 - 250 µm |
| Theoretical spreading rate | 5.7 m ² /l for 125 µm, 2.8 m ² /l for 250 µm * |
| Touch dry after | 6 hours |
| Overcoating interval | min. 12 hours * max. see overcoating table * |
| Full cure after | 7 days * |
| | (data for components) |
| Shelf life (cool and dry place) | at least 12 months * see additional data |
| RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES | <ul style="list-style-type: none"> - for immersion in water, with or without cathodic protection <ul style="list-style-type: none"> • steel; blast cleaned to ISO-Sa2½, blasting profile 40 - 70 µm • steel with approved zinc silicate shop primer; sweep blasted to SPSS-Ss or power tool cleaned to SPSS-Pt3 • existing suitable epoxy coating or coaltar epoxy coating; in sound condition and sufficiently roughened and free from any contamination - for atmospheric exposure conditions: <ul style="list-style-type: none"> • steel; blast cleaned to ISO-Sa2 or ISO-Sa2½, blasting profile 40 - 70 µm • steel with approved shop primer; power tool cleaned to SPSS-Pt2 or SPSS-Pt3 • existing suitable epoxy coating or coaltar epoxy coating; in sound condition and sufficiently roughened and free from any contamination - substrate temperature should be between -10°C up to 15°C during application and curing and at least 3°C above dew point and free from ice and any contamination |

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- during application and curing a substrate temperature down to -10°C is possible, but curing to hardness takes longer and complete resistance will be reached when temperature increases
- maximum relative humidity during application and curing is 85%

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| SYSTEM SPECIFICATION | marine | system sheets: 3101, 3106 |
| INSTRUCTIONS FOR USE | mixing ratio by volume: base to hardener 86 : 14 | |
| | <ul style="list-style-type: none"> - the temperature of the mixed base and hardener should preferably be above 5°C, otherwise extra solvent may be required to obtain application viscosity - too much solvent results in reduced sag resistance and slower cure - thinner should be added after mixing the components | |
| Induction time | none | |
| Pot life | 6 hours at 10°C * * see additional data | |
| AIRLESS SPRAY | | |
| Recommended thinner | Thinner 91-79 | |
| Volume of thinner | 0 - 5% for a dft of 250 µm 10 - 15% for a dft of 125 µm | |
| Nozzle orifice | approx. 0.53 - 0.64 mm (= 0.021 - 0.025 in) | |
| Nozzle pressure | 15 MPa (= approx. 150 bar; 2130 p.s.i.) | |
| AIR SPRAY | | |
| Recommended thinner | Thinner 91-79 | |
| Volume of thinner | 5 - 10%, depending on required thickness and application conditions | |
| Nozzle orifice | 1.5 - 3 mm | |
| Nozzle pressure | 0.2 - 0.4 MPa (= approx. 2 - 4 bar; 28 - 57 p.s.i.) | |
| BRUSH/ROLLER | only for touch up and spot repair | |
| Recommended thinner | Thinner 91-79 | |
| Volume of thinner | 0 - 5% | |
| CLEANING SOLVENT | Thinner 90-53 | |
| SAFETY PRECAUTIONS | for paint and recommended thinners see safety 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 vapour as well as contact between the wet paint and exposed skin or eyes | |

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ADDITIONAL DATA

Film thickness and spreading rate

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| theoretical spreading rate m ² /l | 5.7 | 2.8 |
| dft in µm | 125 | 250 |

max. dft when brushing (touch up and spot repair): 70 µm

Overcoating table for dft up to 250 µm

| substrate temperature | -10°C | 0°C | 10°C | 15°C |
|---|----------|----------|----------|---------|
| minimum interval | 48 hours | 24 hours | 12 hours | 8 hours |
| maximum interval when exposed to direct sunshine | 15 days | 5 days | 3 days | 2 days |
| maximum interval when not exposed to direct sunshine | 30 days | 30 days | 30 days | 20 days |

with SigmaCover 300 and SigmaCover 510 and other compatible paints

- surface should be dry and free from any contamination and ice
- when overcoated with other paints, tar bleeding will occur
- when overcoating work is to be carried out on coats thicker than 125 µm applied in one coat, the minimum overcoating interval must be extended as follows:
 - for 250 µm : 2 times as long
 - for 375 µm : 3 times as long
 - for 500 µm : 4 times as long
- adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)
- when application has to be executed at low temperature care should be taken that the temperature of the mixed paint is at least 15°C, the induction time should be increased to at least one hour

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Curing table for dft up to 250 µm

| substrate temperature | dry to handle | initial cure for exposure to sea water and to slightly polluted atmosphere | full cure for immersion in polluted water or crude oil |
|-----------------------|---------------|--|--|
| -10°C | 72 hours | 12 days | -- |
| -5°C | 48 hours | 7 days | 21 days |
| 0°C | 30 hours | 5 days | 15 days |
| 5°C | 20 hours | 3 days | 10 days |
| 10°C | 12 hours | 48 hours | 7 days |
| 15°C | 8 hours | 42 hours | 5 days |

- adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)

Pot life (at application viscosity)

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|------|---------|
| 5°C | 8 hours |
| 10°C | 6 hours |

Worldwide availability

Whilst it is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis, 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

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|---|----------------------------|
| Explanation to product data sheets | see information sheet 1411 |
| Safety indications | see information sheet 1430 |
| Safety in confined spaces and health safety | |
| Explosion hazard - toxic hazard | see information sheet 1431 |
| Safe working in confined spaces | see information sheet 1433 |
| Directives for ventilation practice | see information sheet 1434 |
| Cleaning of steel and removal of rust | see information sheet 1490 |

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LIMITATION OF LIABILITY

The information in this data sheet is based upon laboratory tests we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the Sigma Coatings products made by PPG Protective & Marine Coatings, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge are reliable. The products and information are designed for users having the requisite knowledge and industrial skills and it is the end-user's responsibility to determine the suitability of the product for its intended use.

PPG Protective & Marine Coatings has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. PPG Protective & Marine Coatings does therefore not accept any liability arising from loss, injury or damage resulting from such use or the contents of this data sheet (unless there are written agreements stating otherwise).

The data contained herein are liable to modification as a result of practical experience and continuous product development.

This data sheet replaces and annuls all previous issues and it is therefore the user's responsibility to ensure that this sheet is current prior to using the product.

The English text of this document shall prevail over any translation thereof.

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| | PDS | 7483 |
| 179014 | brown | 2000002200 |
| 179015 | black | 8000002200 |