

SIGMACOVER 630 TG

4 pages

September 2009
Revision of April 2007

DESCRIPTION

two component surface tolerant high build polyamine cured epoxy primer/
coating

PRINCIPAL CHARACTERISTICS

- surface tolerant coating for lower grade of steel preparation
- particularly suited as maintenance coating for dry cargo holds, decks and hulls for application at higher temperatures
- good impact and abrasion resistance
- compatible with various aged coatings
- overcoatable with most types of coatings
- excellent corrosion resistance
- resistant to splash and spillage of a wide range of chemicals
- good flexibility

COLOURS AND GLOSS

grey, redbrown, aluminium - semigloss

BASIC DATA AT 30°C

(1 g/cm³ = 8.25 lb/US gal; 1 m²/l = 40.7 ft²/US gal)
(data for mixed product)

Mass density	1.4 g/cm ³
Volume solids	83 ± 2%
VOC (supplied)	max. 166 g/kg (Directive 1999/13/EC, SED) max. 229 g/l (approx. 1.9 lb/gal)
Recommended dry film thickness	125 - 200 µm * depending on system and application method
Theoretical spreading rate	6.6 m ² /l for 125 µm, 4.1 m ² /l for 200 µm
Touch dry after	6 hours
Overcoating interval	min. 16 hours * max. 9 months *
Curing time	7 days

(data for components)

Shelf life (cool and dry place)

at least 12 months
* see additional data

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- **for atmospheric exposure conditions:**
 - steel; blast cleaned to ISO-Sa2½ for excellent corrosion protection
 - steel; blast cleaned to ISO-Sa2, blasting profile 40 - 70 µm or power tool cleaned to ISO-St2 for good corrosion protection
 - shop primed steel; pretreated to SPSS-Pt3
 - steel; hydrojetted to VIS WJ2/3 L
 - existing sound epoxy coating systems and most sound alkyd coating systems; sufficiently roughened, dry and free from any contamination
- substrate temperature should be above 15°C and at least 3°C above dew point

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for SigmaCover 630 TG aluminium only:– **for immersion in sea water:****(resistant to Cathodic Protection in systems)**

- 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

INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 83 : 17

- the temperature of the mixed base and hardener should preferably be above 15°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

2.5 hours at 30°C *

* see additional data

AIRLESS SPRAY

Recommended thinner

Thinner 91-92

Volume of thinner

0 - 5%, depending on required thickness and application conditions

Nozzle orifice

approx. 0.48 - 0.53 mm (= 0.019 - 0.021 in)

Nozzle pressure

15 MPa (= approx. 150 bar; 2130 p.s.i.)

AIR SPRAY

Recommended thinner

Thinner 91-92

Volume of thinner

5 - 10%, depending on required thickness and application conditions

Nozzle orifice

1.8 - 2 mm

Nozzle pressure

0.3 - 0.4 MPa (= approx. 3 - 4 bar; 43 - 57 p.s.i.)

BRUSH/ROLLER

Recommended thinner

Thinner 91-92

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

theoretical spreading rate m ² /l	6.6	4.1
dft in µm	125	200

max. dft when brushing: 100 µm

Overcoating table for dft up to 125 µm

substrate temperature	15°C	20°C	30°C	40°C
minimum interval	36 hours	24 hours	16 hours	8 hours
maximum interval	12 months	12 months	9 months	6 months
maximum interval	6 months	6 months	3 months	1 month

with itself

with various epoxy- and polyurethane coatings

- surface should be dry and free from any contamination

Curing table for dft up to 125 µm

substrate temperature	touch dry	dry to handle	full cure
15°C	20 hours	30 hours	25 days
20°C	14 hours	20 hours	15 days
30°C	6 hours	9 hours	7 days
40°C	4 hours	5 hours	4 days
50°C	2 hours	3 hours	2 days

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

Pot life (at application viscosity)

20°C	4 hours
30°C	2.5 hours
40°C	1 hour

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.

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REFERENCES

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

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.

	PDS	7963
205163	grey	5177052200
204167	redbrown	6179052200
215838	aluminium	9000002200