

SIGMACOVER 630 LT

4 pages

September 2009
Revision of September 2005

DESCRIPTION	two component surface tolerant high solids polyamine cured epoxy primer/ coating
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> - self priming coating tolerant to lower grades of steel preparation for atmospheric exposure - cures at temperatures down to -0°C - particularly well suited as maintenance coating for steel structures - excellent corrosion resistance - resistant to splash and spillage of a wide range of chemicals - good abrasion resistance - good flexibility - compatible with various aged coatings - good recoatability with most epoxy-, polyurethane-, chlorinated rubber-, alkyd- and acrylic paints
COLOURS AND GLOSS	grey, offwhite (other colours on request) - gloss
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	1.4 g/cm ³
Volume solids	85 ± 2% (for offwhite)
VOC (supplied)	max. 190 g/kg (Directive 1999/13/EC, SED) max. 268 g/l (approx. 2.2 lb/gal)
Recommended dry film thickness	60 - 150 µm
Theoretical spreading rate	14.2 m ² /l for 60 µm, 5.7 m ² /l for 150 µm
Touch dry after	12 hours *
Overcoating interval	min. 16 hours * max. 2 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	<ul style="list-style-type: none"> - 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 - existing sound epoxy coating systems and most sound alkyd coating systems; sufficiently roughened, dry and free from any contamination - substrate temperature should be above 0°C and at least 3°C above dew point during application and curing

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INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 83 : 17

- the temperature of the mixed base and hardener should preferably be above 10°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

15 minutes, for substrate temperatures below +10°C

Pot life

2 hours at 10°C *

* see additional data

AIRLESS SPRAY

Recommended thinner

Thinner 91-92

Volume of thinner

5 - 10%, 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

10 - 15%, 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 or Thinner 91-99 for better flow

Volume of thinner

5 - 10%

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

ADDITIONAL DATA

Film thickness and spreading rate

theoretical spreading rate m ² /l	14.2	8.5	5.7
dft in µm	60	100	150

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Overcoating table for dft up to 150 µm

with various two pack epoxy coatings

substrate temperature	0°C	5°C	10°C	20°C
minimum interval	24 hours	20 hours	16 hours	8 hours
maximum interval	2 months	2 months	2 months	2 months

- surface should be dry and free from any contamination

Overcoating table for dft up to 150 µm

with polyurethanes

substrate temperature	0°C	5°C	10°C	20°C
minimum interval	64 hours	36 hours	24 hours	16 hours
maximum interval	1 month	1 month	1 month	1 month

- after exceeding of the maximum interval, glossy finishes require a corresponding undercoat
- surface should be dry and free from any contamination
- best intercoat adhesion occurs when the subsequent coat is applied before the preceding coat is fully cured
- if this time is exceeded it may be necessary to roughen the surface

Curing table for dft up to 150 µm

substrate temperature	touch dry	dry to handle	full cure
0°C	24 hours	24 hours	14 days
5°C	18 hours	20 hours	10 days
10°C	12 hours	16 hours	7 days
20°C	4 hours	8 hours	5 days

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

Pot life (at application viscosity)

0°C	3 hours
10°C	2 hours
20°C	1 hour

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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

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	7434
179613	base L	20 ltr
179609	base Z	20 ltr
173524	clear	hardener