

SIGMACOVER 400

(SigmaCover 640)



Globally
Available

4 pages

December 2012
Revision of May 2012

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
- available in a wide colour range
- also available with MIO pigmentation
- good resistance to splash and spillage of chemicals

COLOURS AND GLOSS

RAL colours (other colours available on request) – semigloss

BASIC DATA AT 20 °C

(data for mixed product)

Mass density	1.4 g/cm ³ (white)
Volume solids	85% ± 3%
VOC (Directive 1999/13/EC, SED)	max. 114 g/kg
	163 g/l (1.4 lb/gal)
VOC (EPA Method 24)	180 g/ltr (1.5 lb/gal)
Recommended dry film thickness	100 - 200 µm (3.9 - 7.9 mils)
Theoretical spreading rate	8.5 m ² /l for 100 µm
Touch dry after	6 hours* at 20 °C *
	* see additional data
Overcoating interval	min. 16 hours *
	max. see tables *
Shelf life (cool and dry place)	at least 12 months
	* see additional data

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- steel; blast cleaned to ISO-Sa2½, power tool cleaned to min. ISO-St3 or hand tool clean to ISO-St2 or ultra high pressure water jet to WJ2L
- for immersion exposure: steel; blast cleaned to ISO-Sa2½
- concrete and other cement-bonded substrates; dry, hard and free from contamination such as laitance, grease and dust
- aged suitable coatings; dry and free from any contamination and sufficiently roughened
- for single pack coatings; extra precautions are necessary

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 cure to resin and continue stirring until homogeneous

Pot life

2 hours at 20 °C *

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AIR SPRAY

Recommended thinner
Volume of thinner

Thinner 91-92
0 - 10%, depending on required thickness and application conditions

AIRLESS SPRAY

Recommended thinner
Nozzle orifice
Nozzle pressure

no extra thinner needed
approx. 0.48 mm (= 0.019 in)
15 - 18 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 approx. 80 microns dft. in a single coat application.

CLEANING SOLVENT

Thinner 90-58

ADDITIONAL DATA

Film thickness and spreading rate

theoretical spreading rate m ² /l	8.5	6.8	4.3
dft in µm	100	125	200

Overcoating table for SigmaCover 400 for dft at 125 µm

	substrate temperature	10°C	20°C	30°C	40°C
with itself	minimum interval	36 hours	16 hours	6 hours	4 hours
	maximum interval	3 months	3 months	2 months	1 month
with polyurethanes	minimum interval	36 hours	16 hours	6 hours	4 hours
	maximum interval	1 month	1 month	14 days	7 days

*An extended recoatable window may be allowable in some circumstances. Please contact your PPG PMC representative for more details

Curing

Curing table for dft at 125 µm

substrate temperature	touch dry	dry to handle	full cure
10°C	24 hours	48 hours	21 days
20°C	6 hours	20 hours	7 days
30°C	3 hours	12 hours	4 days
40°C	1 hour	8 hours	3 days

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

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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 min.

Worldwide availability

Whilst it is always the aim of Sigma 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

Conversion tables	see information sheet 1410
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
Specification for mineral abrasives	see information sheet 1491
Surface preparation of concrete (floors)	see information sheet 1496
Relative humidity - substrate temperature - air temperature	see information sheet 1650

SAFETY PRECAUTIONS

- 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
- for paint and recommended thinners see safety sheets 1430, 1431 and relevant material safety data sheets

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