SIGMACOVER 640
(AMERLOCK 400C)

Globally Available

3 pages

November 2009
Revision of October 2009

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/cm³ (white)
Volume solids	87 ± 2%
VOC (supplied)	max. 114 g/kg (Directive 1999/13/EC, SED) max. 163 g/l (approx. 1.4 lb/gal) 180 g/ltr (1.5 lb/gal) (by EPA Method 24)
Recommended dry film thickness	100 - 200 µm
Theoretical spreading rate	8.7 m²/l for 100 µm *
Touch dry after	6 hours *
Overcoating interval	min. 16 hours * max. see tables *

(data for components)

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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AIRLESS SPRAY

Recommended thinner	no extra thinner needed
Nozzle orifice	approx. 0.48 mm (= 0.019 in)
Nozzle pressure	15 - 18 MPa (= approx. 150 - 180 bar; 2130 - 2560 p.s.i.)

AIR SPRAY

Recommended thinner	Thinner 21-06
Volume of thinner	0 - 10%, depending on required thickness and application conditions

BRUSH/ROLLER

– apply evenly, using a well loaded brush or roller
– application by brush or roller will provide approx. 80 microns dft in a single coat application

CLEANING SOLVENT

Thinner 90-58

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

dft in µm	100	125	200
theoretical spreading rate m²/l	8.7	7.0	4.4

Overcoating table for SigmaCover 640 for dft at 125 µm

substrate temperature	10°C	20°C	30°C	40°C
minimum interval	48 hours	16 hours	4 hours	3 hours
maximum interval	extended *			

* This product has an extended maximum overcoating time.
Surfaces to be overcoated must be clean and dry.
Any contamination must be identified and adequately removed.
Particular attention must be paid to surfaces that have been exposed to heat and/or sunlight and where chalking may be present.
A degree of surface cleaning will be required. Your PPG representative can advise on suitable cleaning methods.

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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	5 hours	4 days
40°C	1 hour	3 hours	2 days

– during the curing period precautions must be taken to avoid contact of the coating with moisture, otherwise blushing may occur

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
Surface preparation of concrete (floors)	see information sheet 1496

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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