SIGMACOVER 620
(SIGMACOVER EP ST)

5 pages

January 2013
Revision of August 2012

Description

two component surface tolerant, high build polyamide cured epoxy primer/ coating

PRINCIPAL CHARACTERISTICS

- excellent corrosion resistance
- good flexibility
- surface tolerant coating for lower grade of steel preparation
- good drying and curing property
- easy application by different application method such as airless spray, brush etc.
- low temperature version available if required

COLOURS AND GLOSS

grey, offwhite (other colours on request) – eggshell
aluminium colours (dark grey , light grey)

BASIC DATA AT 20 °C

(1 g/cm³ = 8.35 lb/US gal; 1 m²/l = 40.7 ft²/US gal)

(data for mixed product)

Mass density	1.5 g/cm³
Volume solids	80% ± 2%
VOC (Directive 1999/13/EC, SED)	max. 150 g/kg (Directive 1999/13/EC, SED)
VOC (UK PG 6/23(92) appendix 3)	max. 225 g/l (approx. 1.9 lb/gal) (UK PG 6/23(92) Appendix 3)
Recommended dry film thickness	75 - 200 µm depending on system
Theoretical spreading rate	6.4 m²/l for 125 µm *
Touch dry after	3 hours * at 20 °C
Overcoating interval	min. 8 hours * max. 6 months *
Full cure after	7 days * at 20 °C
	(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 or power tool cleaned to ISO-St2 for good corrosion protection
- shop primed steel; pretreated to SPSS-Pt2
- substrate temperature should be above 5°C and at least 3°C above dew point

for immersion exposure:

- steel; blast cleaned to ISO-Sa2½
- steel with approved zinc silicate shop primer; sweep blasted to SPSS-Ss or power tool cleaned to SPSS-Pt3

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INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 4 : 1

- 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, when substrate temperature above 10°C

Pot life: 4 hours at 20 °C *

* see additional data

AIRLESS SPRAY

Recommended thinner: Thinner 91-92

Volume of thinner: 0 - 10%, depending on required thickness and application conditions

Nozzle orifice: approx. 0.46 - 0.53 mm (= 0.018 - 0.021 in)

Nozzle pressure: 20 - 25 MPa (= 200 - 250 bar; 2901 - 3626 p.s.i.)

BRUSH/ROLLER

Recommended thinner: Thinner 91-92

Volume of thinner: 0 - 5%

Application by roller will leave roller marking and is suitable for minimum dft requirements only.

A roller suitable for epoxy application only must be used.

CLEANING SOLVENT

Thinner 90-53

Film thickness and spreading rate

theoritical spreading rate m^2/l	10.6	8.0	6.4	5.3	4.0
dft in µm	75	100	125	150	200

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with 2 component epoxy and polyurethanes

Overcoating table for Atmospheric Exposure at 125 µm dft

substrate temperature	5°C	10°C	20°C	30°C	40°C
minimum interval	48 hours	24 hours	8 hours	4 hours	2 hours
Max interval when exposed to direct sunshine maximum interval	3 months	3 months	3 months	3 months	3 months
Max interval when **not** exposed to direct sunshine maximum interval	6 months	6 months	6 months	6 months	6 months

– surface should be dry and free from any contamination and sufficiently roughened after long exposure

with 2 component epoxy and polyurethanes

Overcoating table for Immersion Exposure ar 125 µm dft.

substrate temperature	5°C	10 °C	20 °C	30 °C	40 °C
Max recoat immersion minimum interval	48 hours	24 hours	8 hours	4 hours	2 hours
Max recoat immersion maximum interval	2 months	2 months	2 months	2 months	2 months

– surface should be dry and free from any contamination and sufficiently roughened after long exposure

Curing

Curing table for dft up to 125 µm

substrate temperature	touch dry	dry to handle	full cure
5°C	24 hours	48 hours	20 days
10°C	12 hours	24 hours	14 days
20°C	3 hours	8 hours	7 days
30°C	2 hours	6 hours	4 days
40°C	1 hour	3 hours	3 days

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

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Pot life (at application viscosity)

10 °C	10 hours
15 °C	6 hours
20 °C	4 hours
30 °C	2 hours
40 °C	1 hour

Worldwide availability

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, 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

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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	PDS	6825
247964	dark grey	0100002200
247962	light grey	0200002200
332486	buff	3142052200
312642	redbrown	2008002200