New Guard Coatings Group

A global reputation to protect.

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This information is not exhaustive and it is the user's responsibility to ensure that this data sheet is the most current by contacting their local New Guard Coatings Group branch prior to using the coating/product.

SIGMACOVER 577

4 pages

July 2013
Revision of August 2009

Description

two component polyamide cured epoxy sealer

PRINCIPAL CHARACTERISTICS

- sealer coat in Steelguard intumescent coating systems
- good adhesion to steel and galvanised steel
- good adhesion to non-ferrous metals
- good flow and wetting properties

COLOURS AND GLOSS

red oxide, offwhite – matt

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	1.28 g/cm³
Volume solids	51 ± 2%
VOC (Supplied)	max. 381 g/kg (Directive 1999/13/EC, SED) max. 488 g/l (approx. 4.1 lb/gal) max. 435 g/l (approx. 3.6 lb/gal) (UK PG 6/23(92) Appendix 3)
Recommended dry film thickness	50 - 100 µm depending on system
Theoretical spreading rate	10.2 m²/l for 50 µm 5.1 m²/l for 100 µm
Touch dry after	2 hours
Overcoating interval	min. 4 hours * max. 10 days *
Full cure after	7 days*

(data for components)

Shelf life (cool and dry place)	at least 12 months * see additional data

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- galvanised steel; cleaned from grease, salts, contamination and roughened up
- previous coat; sound, dry, free from any contamination and sufficiently roughend
- substrate temperature should be above 10°C and at least 3°C above dew point during application and curing
- maximum relative humidity during application and curing is 85%

INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 80 : 20

- 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	4 hours at 20°C * * see additional data

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AIR SPRAY

Recommended thinner	Thinner 91-83
Volume of thinner	0 - 10%, depending on required thickness and application conditions
Nozzle orifice	1.5 - 2 mm
Nozzle pressure	0.3 - 0.4 MPa (= approx. 3 - 4 bar; 44 - 58 p.s.i.)

AIRLESS SPRAY

Recommended thinner	Thinner 91-83
Volume of thinner	0 - 10%, depending on required thickness and application conditions
Nozzle orifice	approx. 0.38 - 0.53 mm (= 0.015 - 0.021 in)
Nozzle pressure	15 MPa (= approx. 150 bar; 2176 p.s.i.)

BRUSH/ROLLER

	for small areas only (touch up and repair)
Recommended thinner	no thinner is necessary
Volume of thinner	but up to 5% Thinner 91-83 can be added if desired

CLEANING SOLVENT

Thinner 90-58

ADDITIONAL DATA

Film thickness and spreading rate

theoretical spreading rate m²/l	10.2	6.8	5.1
dft in µm	50	75	100

Maximum dft when brushing: 50 µm

Overcoating table for SigmaCover 577 for dft up to 50 µm

with Steelguard intumescent coatings

substrate temperature	10°C	20°C	30°C	40°C
minimum interval	8 hours	4 hours	2 hours	1 hour
maximum interval	14 days	10 days	7 days	3 days

Curing

Curing table for dft up to 50 µm

substrate temperature	touch dry	dry to handle	full cure
10°C	4 hours	8 hours	14 days
20°C	2 hours	4 hours	7 days
30°C	1 hour	1.5 hour	5 days
40°C	30 min.	1 hour	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)

15°C	6 hours
20°C	4 hours
30°C	2 hours

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

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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PDS	7990
offwhite	7001002200
oxide red	2001052200