SIGMA AQUACOVER 200

4 pages

September 2009
Revision of April 2007

DESCRIPTION

two component polyamine cured water borne epoxy primer

PRINCIPAL CHARACTERISTICS

- general purpose epoxy primer in protective coating systems for steel structures in atmospheric exposure
- particularly suitable when solvents are not permitted because of health and safety reasons
- excellent rust preventing properties in industrial or coastal atmospheres
- good adhesion to steel and galvanised steel
- free from lead and chromate containing pigments
- can be overcoated with most dispersion and alkyd paints and 2 component durable finishes
- easy application by brush/roller and (airless) spray

COLOURS AND GLOSS

grey (RAL 7038), buff (RAL 1015) - eggshell

BASIC DATA AT 20°C

(1 g/cm³ = 8.25 lb/US gal; 1 m²/l = 40.7 ft²/US gal)
(data for mixed product)

Mass density	1.3 g/cm³
Volume solids	53 ± 2%
VOC (supplied)	max. 5 g/kg (Directive 1999/13/EC, SED) max. 6 g/l (approx. 0.1 lb/gal) see information sheet 1411
Recommended dry film thickness	75 - 100 µm depending on system
Theoretical spreading rate	7.1 m²/l for 75 µm, 5.3 m²/l for 100 µm
Touch dry after	1.5 hour
Overcoating interval	min. 2 hours (with itself) max. 6 months
Full cure after	4 days *
	(data for components)
Shelf life (cool and dry place)	at least 6 months

* see additional data

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- steel; blast cleaned to ISO-Sa2½, blasting profile 40 - 70 µm or power tool cleaned to min. ISO-St3
- galvanised steel; sweep blasted or otherwise roughened; dry and free from salts and other contamination
- substrate temperature must be above 10°C and at least 3°C above dew point during application and curing
- maximum relative humidity during application and curing is 75%

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INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 70 : 30

- the temperature of the mixed base and hardener should preferably be above 15°C, otherwise extra water may be required to obtain application viscosity
- too much water results in reduced sag resistance and slower cure
- water should be added after mixing the components
- adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)
- must be protected from freezing at all times during storage and/or transport

Induction time: none

Pot life: 3 hours at 20°C *
* see additional data

AIRLESS SPRAY

Recommended thinner: tap water
Volume of thinner: 0 - 5%, depending on required thickness and application conditions
Nozzle orifice: approx. 0.48 mm (= 0.019 in)
Nozzle pressure: 15 MPa (= approx. 150 bar; 2130 p.s.i.)

BRUSH/ROLLER

Recommended thinner: tap water
Volume of thinner: 0 - 5%

CLEANING SOLVENT

tap water and Thinner 70-05

Cleaning Procedures of the spray equipment:
pulsator filter and tip filter must be taken out of the equipment and cleaned properly

following tables illustrate the cleaning procedure of the spray equipment when changing spraying from solvent borne paint to water borne paints (table 1) and from water borne paints to solvent borne paints (table 2)

CLEANING PROCEDURE

Table 1: from solvent borne- to water borne paints

1st cleaning	with Thinner 90-53
2nd cleaning	with Thinner 70-05
3rd cleaning	with warm tap water (30 - 35°C) after which water borne paints can be sprayed

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Table 2: from water borne- to solvent borne paints

1st cleaning	with warm tap water (30 - 35°C)
2nd cleaning	with Thinner 70-05
3rd cleaning	with Thinner 90-53

Thinner 70-05 can be re-used

SAFETY PRECAUTIONS

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

although this is a water borne paint, 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

Overcoating table for Sigma Aquacover 200 for dft up to 100 µm

	substrate temperature	10°C	20°C	30°C	40°C
with Sigma AquaCover 400	minimum interval	3 hours	2 hours	1 hour	45 min.
with SigmaDur 520, SigmaDur 550	minimum interval	24 hours	16 hours	12 hours	8 hours
	maximum interval	6 months	6 months	6 months	6 months

Curing table for dft up to 100 µm

substrate temperature	touch dry	dry to handle	full cure
10°C	3 hours	16 hours	6 days
20°C	1.5 hour	5 hours	4 days
30°C	1 hour	4 hours	3 days
40°C	45 min.	3 hours	2 days

Pot life (at application viscosity)

10°C	4 hours
20°C	3 hours
30°C	2 hours
40°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

	PDS	7870
220700	RAL 7038 (grey)	7038262160
240678	RAL 1015 (buff)	1015262160