SIGMACOVER 410 LT

4 pages

August 2009
Revision of July 2009

DESCRIPTION

two component high solids, high build, polyamide cured epoxy coating

PRINCIPAL CHARACTERISTICS

- general purpose epoxy build coat in protective coating systems for steel and concrete structures exposed to atmospheric land or marine conditions
- excellent durability
- can be recoated with various two component and conventional coatings even after long weathering periods
- easy application by airless spray
- good drying and curing properties at low substrate temperature (down to -5°C)

COLOURS AND GLOSS

MIO and a selected range of colours - flat

BASIC DATA AT 10°C

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

Mass density	1.5 - 1.9 g/cm³, depending on colour
Volume solids	80 ± 2%
VOC (supplied)	max. 126 g/kg (Directive 1999/13/EC, SED) max. 240 g/l (approx. 2.0 lb/gal)
Recommended dry film thickness	75 - 200 µm depending on system
Theoretical spreading rate	10.6 m²/l for 75 µm *
Touch dry after	4 hours *
Overcoating interval	min. 12 hours * max. 6 months *
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

- previous suitable primer; dry and free from any contamination and zinc salts, and sufficiently roughened if necessary
- when applied to zinc silicate, a mist coat and full coat technique is required
- substrate temperature should be above -5°C during application and curing and at least 3°C above dew point and free from ice and any contamination
- during application and curing a substrate temperature down to -5°C is possible, but curing to hardness takes longer and complete resistance will be reached when temperature increases

SIGMACOVER 410 LT

August 2009

INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 80 : 20

- the temperature of the mixed base and hardener should preferably be above 10°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: 10 hours at 10°C *
* see additional data

AIRLESS SPRAY

Recommended thinner: Thinner 91-92
Volume of thinner: 0 - 10%, 30 - 40% when mist coat applied
Nozzle orifice: approx. 0.45 - 0.53 mm (= 0.018 - 0.021 in)
Nozzle pressure: 20 - 25 MPa (= 200 - 250 bar; 2800 - 3500 p.s.i.)

BRUSH/ROLLER

Recommended thinner: Thinner 91-92
Volume of thinner: 0 - 5%

Application by brush may show brush marking, due to the thixatropic nature of the paint and is most suitable to small areas, tight angle areas or for stripe coating or touch up.
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

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

theoretical spreading rate m²/l	10.6	5.3	4.0
dft in µm	75	150	200

SIGMACOVER 410 LT

August 2009

for various two pack epoxy- or polyurethane paint

Overcoating table for SigmaCover 410 LT for dft up to 200 µm

substrate temperature	-5°C	0°C	5°C	10°C	15°C
minimum interval	48 hours	24 hours	16 hours	12 hours	8 hours
maximum interval *	--	--	--	--	--

* This product has an unlimited maximum overcoating interval provided the surface is free from chalking and other contamination.
In cases of exposure to direct sunlight or when the surface is contaminated it is recommended that the surface be cleaned and roughened to ensure good adhesion of the subsequent coating.
The optimum intercoat adhesion is obtained when the subsequent coating is applied before the full cure time of the previous coating has elapsed.

Curing table for dft up to 200 µm

substrate temperature	touch dry	dry to handle	full cure
-5°C	20 hours	24 hours	20 days
0°C	12 hours	16 hours	14 days
5°C	6 hours	12 hours	10 days
10°C	4 hours	8 hours	7 days
15°C	3 hours	5 hours	5 days

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

Pot life (at application viscosity)

10°C	10 hours
15°C	6 hours

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.

SIGMACOVER 410 LT

August 2009

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

PDS 6833