

SIGMACOVER 525

4 pages

October 2005
Revision of September 2005

DESCRIPTION

two component polyamine cured epoxy tiecoat

PRINCIPAL CHARACTERISTICS

- final coat in epoxy underwater anticorrosive systems
- epoxy tiecoat for use with Sigma antifoulings as specified
- excellent water resistance
- good abrasion and impact resistance

COLOURS AND GLOSS

black, grey - flat

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 61 ±2%
 VOC (supplied) max. 271 g/kg (Directive 1999/13/EC, SED)
 max. 365 g/l (approx. 3.0 lb/gal)
 Recommended dry film thickness 75 - 125 µm
 Theoretical spreading rate 8.2 m²/l for 75 µm, 4.9 m²/l for 125 µm
 Touch dry after 8 hours *
 Overcoating interval min. 12 hours *
 max. 14 days *
 Full cure after 14 days *

(data for components)

Shelf life (cool and dry place) at least 12 months
 Flash point base 37°C, hardener 35°C
 * see additional data

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- previous coat; dry and free from any contamination
- 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

SYSTEM SPECIFICATION

marine

system sheets 3101

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INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 86 : 14

- 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

when substrate temperature is below 10°C, allow induction time after mixing of 15 minutes

Pot life

16 hours *
* see additional data

AIRLESS SPRAY

Recommended thinner

Sigma thinner 91-92

Volume of thinner

0 - 5%, depending on required thickness and application conditions

Nozzle orifice

approx. 0.53 - 0.58 mm (= 0.021 - 0.023 in)

Nozzle pressure

12 - 15 MPa (= approx. 120 - 150 bar; 1700 - 2130 p.s.i.)

AIR SPRAY

Recommended thinner

Sigma thinner 91-92

Volume of thinner

0 - 5%, depending on required thickness and application conditions

Nozzle orifice

1.5 - 2 mm

Nozzle pressure

0.3 - 0.4 MPa (= approx. 3 - 4 bar, 43 - 57 p.s.i.)

BRUSH/ROLLER

Recommended thinner

Sigma thinner 91-92

Volume of thinner

0 - 5% if required

CLEANING SOLVENT

Sigma 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 based 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 m ² /l	8.2	6	4.9
dft in µm	75	100	125

max. dft when brushing:

75 µm

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with Sigma antifouling

Overcoating table for SigmaCover 525 at a dft of 125 µm

substrate temperature	-5°C	5°C	10°C	20°C	30°C	40°C
minimum interval	20 hours	16 hours	14 hours	12 hours	10 hours	8 hours
maximum interval	18 days	18 days	18 days	14 days	7 days	3 days

– surface should be dry and free from chalking and contamination

Curing table for SigmaCover 525 for dft up to 125 µm

substrate temperature	minimum curing time before exposure to seawater	full cure
-5°C	120 hours	--
5°C	96 hours	--
10°C	48 hours	21 days
20°C	24 hours	14 days
30°C	18 hours	7 days

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

Pot life (at application viscosity)

15°C	20 hours
20°C	16 hours
30°C	12 hours

Worldwide availability

Whilst it is always the aim of Sigma 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

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Sigma 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. Sigma 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.

DS	7902
231787 black	8000002200
238738 grey	5000002200
240750 grey	5000002150