

SIGMAGUARD 720**(SIGMAGUARD EHB)**

4 pages

September 2005
Revision of January 2003**DESCRIPTION**

two component high solids polyamine cured epoxy coating

PRINCIPAL CHARACTERISTICS

- tank coating with good chemical resistance against a wide range of chemicals
- short curing periods
- good low temperature curing
- easy to clean
- Recognized corrosion control coating (Lloyd's register), see sheet 1886

COLOURS AND GLOSS

light green, grey - gloss

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

1.4 g/cm³

Volume solids

78 ± 2%

VOC (supplied)

max. 163 g/kg (Directive 1999/13/EC, SED)

max. 233 g/l (approx. 1.9 lb/gal)

Recommended dry film
thickness

125 µm *

Theoretical spreading rate

6.2 m²/l for 125 µm *

Touch dry after

7 - 8 hours at 5°C, 5 - 6 hours at 10°C, 2 - 3 hours at 20°C

Overcoating interval

min. 8 hours *

max. 28 days *

Full cure after

see curing table *

(data for components)

Shelf life (cool and dry place)

at least 12 months

Flash point

base 28°C, hardener 25°C

* see additional data

**RECOMMENDED
SUBSTRATE CONDITIONS
AND TEMPERATURES**

- steel; blast cleaned to a minimum of ISO-Sa2½, blasting profile (R_z) 40 - 70 µm
- previous coat; dry, free from any contamination and sufficiently roughened if necessary
- substrate temperature must be above 5°C and at least 3°C above dew point during application and curing

SYSTEM SPECIFICATION

tankcoatings

system sheet 3320

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INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 75 : 25

- 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

allow induction time before use

15°C - 15 min.

20°C - 10 min.

25°C - 5 min.

Pot life

1.5 hours at 20°C *

* see additional data

AIRLESS SPRAY

Recommended thinner

Sigma thinner 91-92

Volume of thinner

up to 10% for a one coat application of 125 µm dft

Nozzle orifice

approx. 0.53 - 0.68 mm (= 0.021 - 0.027 in)

Nozzle pressure

15 MPa (= approx. 150 bar; 2130 p.s.i.)

AIR SPRAY

Recommended thinner

Sigma thinner 91-92

Volume of thinner

5 - 15% for a one coat application of 125 µm dft

Nozzle orifice

1.8 - 2 mm

Nozzle pressure

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

BRUSH

not recommended, only for spot repair and stripe coating

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	7.8	6.2
dft in µm	100	125

max. dft when brushing:

100 µm

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Overcoating table

substrate temperature	5°C	10°C	20°C	30°C	40°C
minimum interval	32 hours	24 hours	8 hours	4 hours	3 hours
maximum interval	28 days	28 days	28 days	14 days	7 days

- surface should be dry and free from any contamination

Curing table

substrate temperature	min. curing time of SigmaGuard 720 tankcoating system before transport of	
	aliphatic petroleum products and ballast water and tanktest with seawater	cargoes without note 4, 7, 8 or 11
5°C	10 days	17 days
10°C	7 days	14 days
15°C	5 days	8 days
20°C	3 days	5 days
30°C	2.5 days	4 days
40°C	1.5 day	3 days

- minimum curing time of SigmaGuard 720 tankcoating system before transport of cargoes with note 4,7,8 or 11: 3 months
- for detailed information on resistance and resistance notes, please refer to the latest issue of the Cargo Resistance List
- adequate ventilation must be maintained during application and curing (please refer to sheet 1433 and 1434)

Pot life (at application viscosity)

15°C	3 hours
20°C	1.5 hour
25°C	1 hour
30°C	30 min.

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.

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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
Specification for mineral abrasives	see information sheet 1491

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The English text of this document shall prevail over any translation thereof.

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