



SIGMAGUARD 720

4 pages

April 2009
Revision of January 2007

DESCRIPTION	two component reinforced high solids polyamine adduct cured epoxy coating
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> - 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/cm ³ = 8.25 lb/US gal; 1 m ² /l = 40.7 ft ² /US gal) (data for mixed product)
Mass density	1.4 g/cm ³
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 m ² /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 * see additional data
RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES	<ul style="list-style-type: none"> - steel; blast cleaned to a minimum of ISO-Sa2½, blasting profile 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 hour at 20°C *

* see additional data

AIRLESS SPRAY

Recommended thinner

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

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

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 m ² /l	7.8	6.2
dft in µm	100	125

max. dft when brushing:

100 µm

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Overcoating table for SigmaGuard 720 for dft up to 125 µm

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 for dft up to 125 µm

substrate temperature	min. curing time of SigmaGuard 720 tankcoating system before transport of	
	aliphatic petroleum products and ballast water and tanktest with sea water	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 sheets 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 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.

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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

LIMITATION OF LIABILITY

The information in this data sheet is based upon laboratory tests we believe to be accurate and is intended for guidance only. All recommendations or suggestions relating to the use of the Sigma Coatings products made by PPG Protective & Marine Coatings, whether in technical documentation, or in response to a specific enquiry, or otherwise, are based on data which to the best of our knowledge are reliable. The products and information are designed for users having the requisite knowledge and industrial skills and it is the end-user's responsibility to determine the suitability of the product for its intended use.

PPG Protective & Marine 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. PPG Protective & Marine 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.

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