

SIGMASHIELD 610

4 pages

November 2006
Revision of April 2006

DESCRIPTION	two component amide cured epoxy coating
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> – specialised coating for use under SigmaGlide fouling release system – excellent water resistance – good impact resistance
COLOURS AND GLOSS	redbrown, blue - eggshell
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	1.3 g/cm ³
Volume solids	57 ± 2%
VOC (supplied)	max. 331 g/kg (Directive 1999/13/EC, SED) max. 437 g/l (approx. 3.6 lb/gal)
Recommended dry film thickness	75 - 150 µm depending on system
Theoretical spreading rate	5.7 m ² /l for 100 µm *
Touch dry after	2 hours *
Overcoating interval	min. see tables * max. see tables *
Curing time	4 days *
	(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"> – previous coat; dry and free from any contamination – substrate temperature should be between 10°C up to 20°C during application and curing and at least 3°C above dew point and free from any contamination
INSTRUCTIONS FOR USE	<p>mixing ratio by volume: base to hardener 80 : 20</p> <ul style="list-style-type: none"> – 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 – thinner should be added after mixing the components
Induction time	none
Pot life	4 hours at 20°C * * see additional data

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AIRLESS SPRAY

Recommended thinner Sigma thinner 91-92
 Volume of thinner 0 - 10%, depending on required thickness and application conditions
 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 0 - 10%, 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 no extra thinner is necessary,
 Volume of thinner but up to 5% Sigma thinner 91-92 can be added if desired

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	7.6	5.7	3.8
dft in µm	75	100	150

max. dft when brushing: 50 µm

Overcoating table for SigmaShield 610 for dft up to 150 µm

substrate temperature	10°C	15°C	20°C
minimum interval	24 hours	20 hours	12 hours
maximum interval	7 days	6 days	5 days

with SigmaGlide 790

– surface should be dry and free from any contamination

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Curing table for dft up to 150 µm

substrate temperature	touch dry	dry to handle	full cure
10°C	3 hours	6 hours	7 days
15°C	2 hours	4 hours	5 days
20°C	2 hours	3 hours	4 days

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

Pot life (at application viscosity)

10°C	7 hours
20°C	4 hours

Worldwide availability

Whilst it is always the aim of SigmaKalon Marine & Protective 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
SigmaKalon Marine & Protective Coatings' General working procedure for application of SigmaGlide	

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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 SigmaKalon Marine & Protective 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.

SigmaKalon Marine & Protective 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. SigmaKalon Marine & Protective 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.

PDS	7978
252439 redbrown	6179052200
247813 blue	1000002200