

SIGMASHIELD 610

4 pages

November 2006
Revision of April 2006

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| 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.

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|-----------------|------------|
| PDS | 7978 |
| 252439 redbrown | 6179052200 |
| 247813 blue | 1000002200 |