

SIGMAPRIME 800 LT

4 pages

September 2005
Revision of April 2005

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|----------------------------------|---|
| DESCRIPTION | two component reinforced high solids amine cured epoxy coating |
| PRINCIPAL CHARACTERISTICS | <ul style="list-style-type: none">– universal epoxy priming system suitable for all vessel areas– excellent anticorrosive properties and water resistance– good abrasion and chemical resistance– excellent crack resistance– suitable for use on a wide range of substrates– suitable for application and curing in a wide range of climatic conditions– user friendly fitting shipyard block stage practices– suitable for bulk supply and twin feed application |
| COLOURS AND GLOSS | grey, yellow/green - gloss |
| BASIC DATA AT 10°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 | 82 ±2% |
| VOC (supplied) | max. 181 g/kg (Directive 1999/13/EC, SED) max. 257 g/l (approx. 2.1 lb/gal) |
| Recommended dry film thickness | 150 - 200 µm depending on system |
| Theoretical spreading rate | 4.1 m ² /l for 200 µm * |
| Touch dry after | 14 hours |
| Overcoating interval | min. 11 hours * max. 21 days * (data for components) |
| Shelf life (cool and dry place) | at least 12 months |
| Flash point | base 26°C, hardener 26°C * see additional data |

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**RECOMMENDED
SUBSTRATE CONDITIONS
AND TEMPERATURES**

- **for immersion exposure:**
 - steel; blast cleaned to ISO-Sa2½
 - steel with approved zinc silicate shop primer; pretreated according to SPSS or powertool cleaned to SPSS-Pt3
- **for atmospheric exposure conditions:**
 - steel; pretreated preferably to ISO-Sa2½ or according to ISO-St3
 - shop primed steel; pretreated to SPSS-Pt3
- previous coat; (SigmaPrime 800 LT) dry and free from any contamination and within the minimum and maximum overcoating time
- substrate temperature should be between -10°C up to 15°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 -10°C is possible, but curing to hardness takes longer and complete resistance will be reached when temperature increases
- maximum relative humidity during application and curing is 85%

INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 75 : 25

- 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
- see also attached application instructions

Pot life

2 hours at 10°C *

* see additional data

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

5 - 10%, depending on required thickness and application conditions

Nozzle orifice

1.7 - 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%

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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 | 5.5 | 4.1 |
| dft in µm | 150 | 200 |

Overcoating table for dfts up to 150 µm

with itself

| substrate temperature | -5°C | 0°C | 5°C | 10°C | 15°C |
|-----------------------|----------|----------|----------|----------|---------|
| minimum interval | 28 hours | 20 hours | 14 hours | 11 hours | 8 hours |
| maximum interval | 21 days | 21 days | 21 days | 21 days | 14 days |

– surface should be dry and free from any contamination

Curing table for SigmaPrime 800 LT for dft up to 150 µm

| substrate temperature | touch dry | dry to handle | full cure |
|-----------------------|-----------|---------------|-----------|
| -10°C | 72 hours | 96 hours | 65 days |
| -5°C | 40 hours | 48 hours | 45 days |
| 0°C | 24 hours | 30 hours | 30 days |
| 5°C | 18 hours | 20 hours | 23 days |
| 10°C | 14 hours | 16 hours | 15 days |
| 15°C | 11 hours | 12 hours | 12 days |

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

Pot life (at application viscosity)

| | |
|------|---------|
| 10°C | 2 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.

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REFERENCES

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|---|----------------------------|
| 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 |

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

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| DS | 7940 |
| 237608 yellow/green | 4009002200 |
| 237609 grey | 9515052200 |