

SIGMAPRIME 800 LT

4 pages

September 2005
Revision of April 2005**DESCRIPTION**

two component reinforced high solids amine cured epoxy coating

PRINCIPAL CHARACTERISTICS

- 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/cm³ = 8.25 lb/US gal; 1 m²/l = 40.7 ft²/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
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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

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 products made by Sigma 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.

Sigma 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. Sigma 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.

DS	7940
237608 yellow/green	4009002200
237609 grey	9515052200