

SIGMAPRIME 200 LT SERIES

(SIGMAPRIME SERIES LT)

4 pages

September 2005
Revision of June 2003

DESCRIPTION

two component multi purpose anticorrosive epoxy system

PRINCIPAL CHARACTERISTICS

- universal epoxy priming system suitable for all vessel areas
- excellent anticorrosive properties and water resistance
- good abrasion and chemical resistance
- excellent adhesion to steel, shop primer, galvanised steel and non ferrous metals
- excellent recoatability
- suitable for application and curing in a wide range of climatic conditions
- suitable for bulk supply and twin feed application

COLOURS AND GLOSS

grey, yellow/green (redbrown for SigmaPrime 200 LT K) - eggshell

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)

	SigmaPrime 200 LT:	SigmaPrime 200 LT K:
Mass density	1.3 g/cm ³	1.4 g/cm ³
Volume solids	57 ± 2%	60 ± 2%
VOC (supplied)	max. 331 g/kg (Directive 1999/13/EC, SED) max. 437 g/l (approx. 3.6 lb/gal)	max. 291 g/kg (Directive 1999/13/EC, SED) max. 397 g/l (approx. 3.3 lb/gal)
Recommended dry film thickness	75 - 200 µm depending on system	100 - 200 µm depending on system
Theoretical spreading rate	7.6 m ² /l for 75 µm, 2.9 m ² /l for 200 µm *	6 m ² /l for 100 µm, 3 m ² /l for 200 µm *
Touch dry after	3 hours *	
Overcoating interval	min. see tables * max. see tables *	
Curing time	7 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 (dry or wet) 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
 - galvanised steel; cleaned from grease, salts, contamination
- 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 80 : 20

- the temperature of the mixed base and hardener should preferably be above 5°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

7 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

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

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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			
SigmaPrime 200 LT	7.6		2.9
SigmaPrime 200 LT K		6	3
dft in µm	75	100	200

max. dft when brushing:

50 µm

Overcoating table for two pack epoxy coatings for dft up to 150 µm

substrate temperature	-10°C	-5°C	0°C	10°C	15°C
minimum interval	48 hours	24 hours	16 hours	6 hours	4 hours
maximum interval when not exposed to direct sunshine	3 months	3 months	3 months	2 months	1 month
maximum interval when exposed to direct sunshine	2 months	2 months	2 months	1 month	1 month

– surface should be dry and free from any contamination

Curing table for dft up to 150 µm

substrate temperature	touch dry	dry to handle	full cure
-10°C	20 hours	48 hours	21 days
-5°C	10 hours	21 hours	14 days
5°C	5 hours	10 hours	9 days
10°C	3 hours	6 hours	7 days
15°C	2 hours	4 hours	5 days

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

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Pot life (at application viscosity)

5°C	10 hours
10°C	7 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.

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		7931
SigmaPrime 200 LT yellow/green	204702	4009002200
SigmaPrime 200 LT grey	211283	9515022200
SigmaPrime 200 LT K yellow/green		4009002200
SigmaPrime 200 LT K redbrown		2008002200