

SIGMAGUARD 215**(SIGMAGUARD PRIMER 15)**

4 pages

September 2005
Revision of June 2002**DESCRIPTION**

two component polyamide cured epoxy primer

PRINCIPAL CHARACTERISTICS

- epoxy primer approved by KIWA under certified coatings for contact with drinking water
- good adhesion to steel
- good flow and wetting properties
- good water and corrosion resistance
- cures at temperatures down to +5°C
- long recoating intervals are possible when overcoating with epoxy coatings
- compatible with cathodic protection systems
- certified by KIWA - K12827/01 of 1998-09-01

COLOURS AND GLOSS

yellow/green - eggshell

BASIC DATA AT 20°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/cm³

Volume solids

57 ± 2%

VOC (supplied)

max. 312 g/kg (Directive 1999/13/EC, SED)
max. 424 g/l (approx. 3.5 lb/gal)Recommended dry film
thickness

75 µm depending on system

Theoretical spreading rate

7.6 m²/l for 75 µm *

Touch dry after

30 minutes

Overcoating interval

min. 16 hours *
max. 3 - 6 months *

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**RECOMMENDED
SUBSTRATE CONDITIONS
AND TEMPERATURES**

- **for immersion exposure:**
 - steel; blast cleaned to ISO-Sa2½
- substrate temperature should be above 5°C and at least 3°C above dew point during application and curing

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INSTRUCTIONS FOR USE

mixing ratio by volume: base to hardener 80 : 20

- the temperature of the mixed base and hardener should preferably be above 15°C, otherwise extra solvent may be required to obtain application viscosity
- too much solvent results in reduced sag resistance and slower cure
- thinner should be added after mixing the components

Induction time

none

Pot life

14 hours at 20°C *

* see additional data

AIRLESS SPRAY

Recommended thinner

Sigma thinner 91-92

Volume of thinner

10 - 25% for dft 35- 80 µm

Nozzle orifice

approx. 0.46 mm (= 0.018 in)

Nozzle pressure

15 MPa (= approx. 150 bar; 2130 p.s.i.)

AIR SPRAY

Recommended thinner

Sigma thinner 91-92

Volume of thinner

0 - 5%, 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
dft in µm	75

max. dft when brushing:

50 µm

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Overcoating table for two pack epoxy

substrate temperature	5°C	10°C	15°C	20°C	30°C	40°C
minimum interval	72 hours	48 hours	24 hours	16 hours	12 hours	8 hours
maximum interval when not exposed to daylight	6 months	6 months	6 months	6 months	4 months	3 months
maximum interval when exposed to daylight	3 months	3 months	3 months	3 months	2 months	2 months

– surface should be dry and free from chalking and contamination

Curing table

substrate temperature	touch dry	dry to handle	full cure
5°C	2 hours	6 hours	21 days
10°C	1 hour	4 hours	14 days
15°C	45 min.	3 hours	10 days
20°C	30 min.	2 hours	7 days
30°C	20 min.	1 hour	5 days

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

Pot life (at application viscosity)

15°C	16 hours
20°C	14 hours
25°C	11 hours
30°C	8 hours
35°C	5 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

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.

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