

SigmaRite 4188

3 pages

January 2010

DESCRIPTION	two component high solids epoxy coating
PRINCIPAL CHARACTERISTICS	<ul style="list-style-type: none"> - can be used directly to metal - very good surface wetting - excellent corrosion resistance - outstanding (sea)water resistance - resistant to well designed/controlled cathodic protection - will continue to cure underwater - excellent abrasion and impact resistance
COLOURS AND GLOSS	limited colour range available - semigloss
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	1.7 g/cm ³
Volume solids	85 ± 2%
VOC (supplied)	max. 105 g/kg (Directive 1999/13/EC, SED) max. 161 g/l (approx. 1.35 lb/gal)
Recommended dry film thickness	300 - 750 µm depending on system
Theoretical spreading rate	2.8 m ² /l for 300 µm *
Touch dry after	4 hours
Overcoating interval	min. 16 hours * max. 2 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"> - for immersion exposure: <ul style="list-style-type: none"> • steel; blast cleaned to ISO-Sa2½, blasting profile 50 - 100 µm • steel with approved zinc silicate shop primer; pretreated according to SPSS-Ss • substrate temperature should be above 5°C and at least 3°C above dew point during application and curing
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 and slower cure - thinner should be added after mixing the components
Pot life	45 minutes at 20°C * * see additional data

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AIRLESS SPRAY

Recommended thinner Thinner 21-06
 Volume of thinner 0 - 5%, depending on required thickness and application conditions
 Nozzle orifice approx. 0.48 - 0.53 mm (= 0.019 - 0.021 in)
 Nozzle pressure 15 MPa (= approx. 150 bar; 2130 p.s.i.)

CLEANING SOLVENT

Thinner 90-58

SAFETY PRECAUTIONS

for paint and recommended thinners see safety sheets 1430, 1431 and relevant material safety data sheets

this is a solvent borne 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	2.8	1.7	1.1
dft in µm	300	500	750

Overcoating table for SigmaRite 4188 for dfts up to 300 µm

with itself

substrate temperature	5°C	10°C	20°C
minimum interval *	24 hours	24 hours	16 hours
maximum interval	7 days	4 days	2 days

- surface should be dry and free from any contamination
- adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)

Curing table for dft up to 150 µm

substrate temperature	for immersion in water
5°C	3 days
10°C	2 days
20°C	1 day

Pot life (at application viscosity)

15°C	60 min.
20°C	45 min.

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Worldwide availability

Whilst it is always the aim of PPG Protective & Marine 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 Sigma Coatings products made by PPG Protective & Marine 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.

PPG Protective & Marine 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. PPG Protective & Marine 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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