

# SIGMA ECOFLEET 290

3 pages

May 2011  
Revision of April 2009

<b>DESCRIPTION</b>	TBT-free selfpolishing antifouling with cuprous oxide and organic biocides as active ingredients
<b>PRINCIPAL CHARACTERISTICS</b>	<ul style="list-style-type: none"> <li>- TBT-free selfpolishing antifouling for new building and maintenance</li> <li>- controls shell and weed fouling for service periods up to 60 months, depending on vessel type, operation characteristics and system applied</li> <li>- controlled polishing rate to give effective protection in accordance with the specified film thickness and smoothing of the surface</li> <li>- complies with IMO Antifouling Systems Convention</li> </ul>
<b>COLOURS AND GLOSS</b>	redbrown, brown, black - flat
<b>BASIC DATA AT 20°C</b>	(1 g/cm <sup>3</sup> = 8.35 lb/US gal; 1 m <sup>2</sup> /l = 40.7 ft <sup>2</sup> /US gal)
Mass density	1.8 g/cm <sup>3</sup>
Volume solids	55 ± 2%
VOC (supplied)	max. 233 g/kg (Directive 1999/13/EC, SED) max. 420 g/l (approx. 3.5 lb/gal)
Recommended dry film thickness	75 - 150 µm depending on system
Theoretical spreading rate	7.3 m <sup>2</sup> /l for 75 µm, 5.5 m <sup>2</sup> /l for 100 µm, 3.7 m <sup>2</sup> /l for 150 µm
Touch dry after	1 hour at 20°C
Overcoating interval	min. 6 hours at 20°C
Refloating time	min. 8 hours *
Shelf life (cool and dry place)	at least 12 months * see additional data
<b>RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES</b>	<ul style="list-style-type: none"> <li>- previous coat; dry and free from any contamination</li> <li>- suitable high performance anticorrosive (coaltar epoxy, epoxy and vinyl tar)</li> <li>- substrate temperature should be at least 3°C above dew point</li> </ul>
<b>INSTRUCTIONS FOR USE</b>	<ul style="list-style-type: none"> <li>- stir well before use</li> <li>- the temperature of the paint should preferably be above 15°C, otherwise extra thinner may be required to obtain application viscosity</li> <li>- too much solvent results in reduced sag resistance</li> </ul>
<b>AIRLESS SPRAY</b>	
Recommended thinner	Thinner 21-06
Volume of thinner	0 - 3%, depending on required thickness and application conditions
Nozzle orifice	approx. 0.53 - 0.68 mm (= 0.021 - 0.027 in)
Nozzle pressure	12 - 15 MPa (= approx. 120 - 150 bar; 1700 - 2130 p.s.i.)
<b>BRUSH/ROLLER</b>	<ul style="list-style-type: none"> <li>- only for touch up and repair</li> <li>- multicoat roller or brush application is not recommended</li> <li>- max. dft achievable by brush or roller is 50 µm</li> </ul>
Recommended thinner	Thinner 21-06
Volume of thinner	0 - 3%
<b>CLEANING SOLVENT</b>	Thinner 21-06

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## 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 <sup>2</sup> /l	7.3	5.5	3.7
dft in µm	75	100	150

### Overcoating table for Sigma EcoFleet 290 with itself for dft up to 150 µm

substrate temperature	5°C	10°C	20°C	30°C
minimum interval	18 hours	12 hours	6 hours	4 hours
refloating	24 hours	12 hours	8 hours	6 hours

- maximum overcoating time for SigmaCover 510 with Sigma EcoFleet 290 is 48 hours at 20°C
- the above data are a fair indication for normal drydockings
- longer drying times may be necessary at higher dft and under unfavourable atmospheric conditions

## 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

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## 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.

Depending on specific country of application the following versions of the Sigma Ecofleet 290 are available:

	PDS	7297
139362	redbrown	2008002200
139363	brown	2000002200
146036	black	8000002200
238458	EU redbrown	2008002200
239069	EU brown	2000002200
218998	A redbrown	2008002200
269704	A brown	2000002200
249481	S redbrown	2008002200
249482	S brown	2000002200