

# SIGMA ECOFLEET® 290

## DESCRIPTION

TBT-free self-polishing antifouling, with cuprous oxide and organic biocides as active ingredients

## PRINCIPAL CHARACTERISTICS

- TBT-free self-polishing antifouling for new-building and maintenance
- Controls shell and weed fouling for service periods up to 60 months, depending on vessel type, operation characteristics and system applied
- Controlled polishing rate to give effective protection in accordance with the specified film thickness and smoothing of the surface
- Complies with IMO Antifouling Systems Convention

## COLOR AND GLOSS LEVEL

- Redbrown, brown, black
- Flat

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	One
Mass density	1.8 kg/l (15.0 lb/US gal)
Volume solids	55 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 233.0 g/kg max. 420.0 g/l (approx. 3.5 lb/US gal)
Recommended dry film thickness	75 - 150 µm (3.0 - 6.0 mils) depending on system
Theoretical spreading rate	7.3 m <sup>2</sup> /l for 75 µm (294 ft <sup>2</sup> /US gal for 3.0 mils)
Dry to touch	1 hour
Overcoating Interval	Minimum: 6 hours
Refloating time	Minimum: 8 hours
Shelf life	At least 18 months when stored cool and dry

### Notes:

- See ADDITIONAL DATA – Spreading rate and film thickness
- See ADDITIONAL DATA – Overcoating intervals

## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

- Suitable high performance anticorrosive tiecoats
- Previous coat must be sound, dry and free from any contamination



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**Substrate temperature and application conditions**

- Substrate temperature during application should be at least 3°C (5°F) above dew point
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**INSTRUCTIONS FOR USE**

- Stir well before use
  - The temperature of the paint should preferably be above 15°C (59°F), otherwise extra thinner may be required to obtain application viscosity
  - Adding too much thinner results in reduced sag resistance
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**Airless spray****Recommended thinner**

THINNER 21-06

**Volume of thinner**

0 - 3%, depending on required thickness and application conditions

**Nozzle orifice**

Approx. 0.53 – 0.69 mm (0.021 – 0.027 in)

**Nozzle pressure**12.0 - 15.0 MPa (approx. 120 - 150 bar; 1741 - 2176 p.s.i.)

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**Brush/roller**

- Only for touch-up and repair
- Multicoat roller or brush application is not recommended. Maximum DFT achievable by brush or roller is 50 µm (2.0 mils)

**Recommended thinner**

THINNER 21-06

**Volume of thinner**0 - 3%

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**Cleaning solvent**THINNER 21-06

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## ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
75 µm (3.0 mils)	7.3 m <sup>2</sup> /l (294 ft <sup>2</sup> /US gal)
100 µm (4.0 mils)	5.5 m <sup>2</sup> /l (221 ft <sup>2</sup> /US gal)
150 µm (6.0 mils)	3.7 m <sup>2</sup> /l (147 ft <sup>2</sup> /US gal)

Overcoating interval for DFT up to 150 µm (6.0 mils)					
Overcoating with...	Interval	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)
itself	Minimum	18 hours	12 hours	6 hours	4 hours
	Refloating - Minimum	24 hours	12 hours	8 hours	6 hours

### Notes:

- Maximum overcoating time for SIGMACOVER 510 with SIGMA ECOFLEET 290 is 48 hours at 20°C (68°F)
- The above data are a fair indication for normal application conditions
- Longer drying times may be necessary at higher DFT and under unfavorable atmospheric conditions

## SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION 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 vapor, as well as contact between the wet paint and exposed skin or eyes

## WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, 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	INFORMATION SHEET	1411
• SAFETY INDICATIONS	INFORMATION SHEET	1430
• SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431

## WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.



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

Article code	Color	Reference
218998	A redbrown	2008002200
269704	A brown	2000002200
249481	S redbrown	2008002200
249482	S brown	2000002200

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