

# SIGMA ECOFLEET® 290

## DESCRIPTION

linear polishing antifouling, particularly suitable for deep sea going vessels

## PRINCIPAL CHARACTERISTICS

- TBT-free self-polishing antifouling for new-building and maintenance
- Controls settlement of shell and weed fouling for prolonged periods, depending on sailing pattern and routes
- 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 2010/75/EU, SED: max. 233.0 g/kg max. 420.0 g/l (approx. 3.5 lb/US gal) China GB 38469-2019 (tested) 413.0 g/l (approx. 3.4 lb/gal)
Recommended dry film thickness	75 - 160 µm (3.0 - 6.3 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



# SIGMA ECOFLEET® 290

## **Substrate temperature and application conditions**

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

---

## **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

---

### **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.)

---

### **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%

---

### **Cleaning solvent**

THINNER 21-06

---

## **ADDITIONAL DATA**

<b>Spreading rate and film thickness</b>	
<b>DFT</b>	<b>Theoretical spreading rate</b>
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)
160 µm (6.3 mils)	3.4 m <sup>2</sup> /l (140 ft <sup>2</sup> /US gal)

# SIGMA ECOFLEET® 290

Overcoating interval for DFT up to 160 µm (6.3 mils)							
Overcoating with...	Interval	-5°C (23°F)	0°C (32°F)	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)
itself	Minimum	24 hours	18 hours	12 hours	10 hours	6 hours	4 hours
	Refloating - Minimum	36 hours	30 hours	24 hours	12 hours	8 hours	6 hours

**Notes:**

- Longer drying times may be necessary at higher DFT and under unfavorable atmospheric conditions
- Above table is a fair indication for normal application conditions. Please contact your PPG representative for data at much lower and higher DFT 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.

## LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG’s knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user’s responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer’s responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at [www.ppgpmc.com](http://www.ppgpmc.com). The English text of this sheet shall prevail over any translation thereof.



# SIGMA ECOFLEET® 290

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
331470	S redbrown	2008002150
331471	S brown	2000002150
350210	S black	800000ID2200
365120	S black	800000ID1500

The PPG logo, and all other PPG marks are property of the PPG group of companies. All other third-party marks are property of their respective owners.

