

SIGMA ECOFLEET® 690

DESCRIPTION

High-activity, self-polishing antifouling, for extreme and aggressive fouling conditions

PRINCIPAL CHARACTERISTICS

- TBT-free self-polishing antifouling for maintenance and repair market
- Specifically designed for coastal and low activity vessels
- 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
- Complies with IMO Antifouling Systems Convention

COLOR AND GLOSS LEVEL

- Redbrown, brown
- Flat

BASIC DATA AT 20°C (68°F)

Data for product	
Number of components	One
Mass density	1.9 kg/l (15.9 lb/US gal)
Volume solids	70 ± 2%
VOC (Supplied)	Directive 2010/75/EU, SED: max. 141.0 g/kg max. 267.0 g/l (approx. 2.2 lb/US gal) China GB 38469-2019 (tested) 267.0 g/l (approx. 2.2 lb/gal)
Recommended dry film thickness	75 - 210 µm (3.0 - 8.3 mils) depending on system
Theoretical spreading rate	9.3 m ² /l for 75 µm (374 ft ² /US gal for 3.0 mils) 7.0 m ² /l for 100 µm (281 ft ² /US gal for 4.0 mils)
Dry to touch	1 hour
Overcoating Interval	Minimum: 6 hours
Shelf life	At least 12 months when stored cool and dry

Notes:

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



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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 and curing should be above -5°C (23°F)
 - Substrate temperature during application and curing should be at least 3°C (5°F) above dew point
 - Relative humidity during application and curing should not exceed 85%
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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.)

Brush/roller

- Only for touch-up and repair

Recommended thinner

THINNER 21-06

Volume of thinner

0 - 3%

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Cleaning solvent

- THINNER 21-06

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
75 µm (3.0 mils)	9.3 m ² /l (374 ft ² /US gal)
100 µm (4.0 mils)	7.0 m ² /l (281 ft ² /US gal)
150 µm (6.0 mils)	4.7 m ² /l (187 ft ² /US gal)
200 µm (8.0 mils)	3.5 m ² /l (140 ft ² /US gal)

Overcoating interval for DFT up to 150 µm (6.0 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	30 hours	24 hours	18 hours	12 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

- 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
- See Safety Data Sheet and product label for complete safety and precaution requirements

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & 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

- Information sheet | Explanation of product data sheets



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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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AVAILABILITY OF PACKAGING

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

Article code	Color	Reference
296989	Brown	2000002200
296988	Redbrown	2008002200

