

SIGMA ALPHAGEN™ 650

DESCRIPTION

High-performance, TBT-free, self-polishing antifouling for coastal operating ships, with cuprous oxide and organic biocides for aggressive fouling conditions

PRINCIPAL CHARACTERISTICS

- High-activity, TBT-free, self-polishing, antifouling for coastal-operating vessels
- TBT-free self-polishing antifouling for new-building and maintenance
- Controls common types of shell and weed fouling for long service periods, depending on sailing pattern and routes
- Controlled polishing rate to give effective protection in accordance with the specified dry film thickness
- Complies with IMO Antifouling Systems Convention

COLOR AND GLOSS LEVEL

- Redbrown, brown, black
- Flat

BASIC DATA AT 20°C (68°F)

Data for product	
Number of components	One
Mass density	2.0 kg/l (16.7 lb/US gal)
Volume solids	57 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 173.0 g/kg max. 340.0 g/l (approx. 2.8 lb/US gal)
Recommended dry film thickness	75 - 150 µm (3.0 - 6.0 mils) depending on system
Theoretical spreading rate	3.8 m ² /l for 150 µm (152 ft ² /US gal for 6.0 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

- Previous coat must be sound, dry and free from any contamination
- Suitable high performance anticorrosive (epoxy)
- For the epoxy anticorrosive system, SIGMACOVER 525 or SIGMACOVER 555 should be used as a tiecoat



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Substrate temperature and application conditions

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

INSTRUCTIONS FOR USE

- The paint should be stirred well before use, preferably by means of a mechanical mixer, to ensure homogeneity
- 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

Recommended thinner

THINNER 21-06

Volume of thinner

0 - 3%

Cleaning solvent

THINNER 21-06

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
75 µm (3.0 mils)	7.6 m ² /l (305 ft ² /US gal)
100 µm (4.0 mils)	5.7 m ² /l (229 ft ² /US gal)
150 µm (6.0 mils)	3.8 m ² /l (152 ft ² /US gal)

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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	6 hours	4 hours

Notes:

- The above data are a fair indication for normal dry dockings
- 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 |

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

Article code	Color	Reference
225899	redbrown	2008002200
230247	brown	2000002200
234164	black	8000002200

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