5 pages June 2012 Revision of April 2009

**Description** two component polyamine cured epoxy tiecoat

**PRINCIPAL CHARACTERISTICS** – final coat in epoxy underwater anticorrosive systems

epoxy tiecoat for use with Sigma antifoulings as specified

excellent water resistance

good abrasion and impact resistance

COLOURS AND GLOSS black, grey – flat

**BASIC DATA AT 20 °C** (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)

(data for mixed product)

Mass density 1.3 g/cm<sup>3</sup> Volume solids  $61\% \pm 2\%$ 

VOC (Directive 1999/13/EC, SED) max. 271 g/kg (Directive 1999/13/EC, SED)

VOC (UK PG 6/23(92) appendix 3) max. 365 g/l (approx. 3.0 lb/gal)

Recommended dry film thickness  $75 - 125 \mu m$ Theoretical spreading rate  $8.2 \text{ m}^2/\text{I}$  for  $75 \mu m$  $4.9 \text{ m}^2/\text{I}$  for  $125 \mu m$ 

8 hours at 20 °C

Overcoating interval min. 12 hours \*

max. 14 days \*

Full cure after 14 days \* at 20 °C (data for components)

Shelf life (cool and dry place) at least 12 months

\* see additional data

RECOMMENDED
SUBSTRATE CONDITIONS
AND TEMPERATURES

Touch dry after

previous coat; dry and free from any contamination

 substrate temperature should be above -5°C during application and curing and at least 3°C above dew point and free from ice and any contamination

 during application and curing a substrate temperature down to -5°C is possible, but curing to hardness takes longer and complete resistance will be reached when temperature increases

SYSTEM SPECIFICATION marine system sheets: 3101

**INSTRUCTIONS FOR USE** mixing ratio by volume: base to hardener 86 : 14

 the temperature of the mixed base and hardener should preferably be above 15°C, otherwise extra solvent may be required to obtain application viscosity

thinner should be added after mixing the components

 $-\,$  too much solvent results in reduced sag resistance and slower cure when substrate temperature is below 10°C, allow induction time after mixing

of 15 minutes



Induction time



June 2012

Pot life 18 hours at 20 °C \*

\* see additional data

**AIR SPRAY** 

Recommended thinner Thinner 91-92

Volume of thinner 0 - 5%, depending on required thickness and application conditions

Nozzle orifice 1.5 - 2 mm

Nozzle pressure 0.3 - 0.4 MPa (= approx. 3 - 4 bar; 44 - 58 p.s.i.)

**AIRLESS SPRAY** 

Recommended thinner Thinner 91-92

Volume of thinner 0 - 5%, depending on required thickness and application conditions

Nozzle orifice approx. 0.53 - 0.58 mm (= 0.021 - 0.023 in)

Nozzle pressure 12 - 15 MPa (= approx. 120 - 150 bar; 1740 - 2176 p.s.i.)

**BRUSH/ROLLER** 

Recommended thinner Thinner 91-92
Volume of thinner 0 - 5% if required

CLEANING SOLVENT Thinner 90-53

## ADDITIONAL DATA Film thickness and spreading rate

theoritical spreading rate m2/l	8.2	6.0	4.9	
dft in µm	75	100	125	

Maximum dft when brushing: 75 μm

#### Overcoating table for SigmaCover 525 for dft up to 125 µm

10°C 40°C substrate -5°C 5°C 20°C 30°C temperature minimum interval 20 16 14 12 10 8 hours hours hours hours hours hours 18 7 3 maximum interval 18 18 14 days days days days days days

surface should be dry and free from chalking and contamination



with Sigma antifoulings



June 2012

#### Curing

## Curing table for dft up to 125 µm

substrate temperature	full cure	Immersion
-5°C		120 hours
5°C		96 hours
10°C	21 days	48 hours
20°C	14 days	24 hours
30°C	7 days	18 hours

 adequate ventilation must be maintained during application and curing (please refer to sheets 1433 and 1434)

#### Pot life (at application viscosity)

15 °C	20 hours
20 °C	16 hours
30 °C	12 hours

## Worldwide availability

Whilst it is always the aim of Sigma 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 Safety indications	see information sheet 1411 see information sheet 1430
Safety in confined spaces and health safety	
Explosion hazard - toxic hazard	see information sheet 1431
Safe working in confined spaces	see information sheet 1433
Directives for ventilation practice	see information sheet 1434

#### **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







June 2012

#### **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.

The English text of this data sheet shall prevail over any translation thereof.







June 2012

	PDS	7902
231787	black	8000002200
238738	grey	5000002200
240750	grey	5000002150



