

SIGMACOVER™ 525

DESCRIPTION

Two-component, polyamine-cured epoxy tiecoat

PRINCIPAL CHARACTERISTICS

- Final coat in epoxy underwater anticorrosive systems
- Epoxy tiecoat for use with PPG antifoulings as specified
- Excellent water resistance
- Good abrasion- and impact resistance

COLOR AND GLOSS LEVEL

- Black, gray
- Flat

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.3 kg/l (10.8 lb/US gal)
Volume solids	61 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 271.0 g/kg max. 365.0 g/l (approx. 3.0 lb/US gal)
Recommended dry film thickness	75 - 125 µm (3.0 - 5.0 mils)
Theoretical spreading rate	8.1 m ² /l for 75 µm (326 ft ² /US gal for 3.0 mils) 4.9 m ² /l for 125 µm (196 ft ² /US gal for 5.0 mils)
Dry to touch	8 hours
Overcoating Interval	Minimum: 12 hours Maximum: 14 days
Full cure after	14 days
Shelf life	Base: at least 24 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

Notes:

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

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Previous coat must be 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 down to -5°C (23°F) is acceptable; provided the substrate is free from ice and dry
- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point

SYSTEM SPECIFICATION

- ANTICORROSIVE SYSTEMS FOR UNDERWATER AND BOOTTOP - SYSTEM SHEET 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 (59°F), otherwise extra thinner may be required to obtain application viscosity
- Thinner should be added after mixing the components
- Adding too much thinner results in reduced sag resistance and slower cure

Induction time

Allow induction time before use

Mixed product induction time	
Mixed product temperature	Induction time
Below 10°C (50°F)	15 minutes

Pot life

18 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

Air spray

Recommended thinner

THINNER 91-92

Volume of thinner

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

Nozzle orifice

1.5 – 2.0 mm (approx. 0.060 – 0.079 in)

Nozzle pressure

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



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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

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

Brush/roller

Recommended thinner

THINNER 91-92

Volume of thinner

Up to 5% THINNER can be added if desired

Cleaning solvent

THINNER 90-53

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
75 µm (3.0 mils)	8.1 m ² /l (326 ft ² /US gal)
100 µm (4.0 mils)	6.1 m ² /l (245 ft ² /US gal)
125 µm (5.0 mils)	4.9 m ² /l (196 ft ² /US gal)

Note: Maximum DFT when brushing: 75 µm (3.0 mils)

Overcoating interval for DFT up to 125 µm (5.0 mils)							
Overcoating with...	Interval	-5°C (23°F)	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
PPG antifoulings	Minimum	20 hours	16 hours	14 hours	12 hours	10 hours	8 hours
	Maximum	18 days	18 days	18 days	14 days	7 days	3 days

Note: Surface should be dry and free from chalking and contamination

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Curing time for DFT up to 125 µm (5.0 mils)

Substrate temperature	Service- water immersion	Full cure
-5°C (23°F)	N/A	5 days
5°C (41°F)	N/A	4 days
10°C (50°F)	21 days	48 hours
20°C (68°F)	14 days	24 hours
30°C (86°F)	7 days	18 hours

Note: Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

Pot life (at application viscosity)

Mixed product temperature	Pot life
15°C (59°F)	20 hours
20°C (68°F)	16 hours
30°C (86°F)	12 hours

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
SAFE WORKING IN CONFINED SPACES	INFORMATION SHEET	1433
DIRECTIVES FOR VENTILATION PRACTICE	INFORMATION SHEET	1434



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