

SIGMACOVER™ 520

DESCRIPTION

Two component, high solids epoxy tiecoat

PRINCIPAL CHARACTERISTICS

- Final coat in epoxy underwater anticorrosive systems
- Epoxy tiecoat for use with PPG antifoulings as specified
- Suitable for sea water immersion on underwater structures and ships hulls
- Extended recoating intervals (see table)
- Easy application by airless spray and brush
- Meets VOC regulations for General Use category under Federal NESHAP for Shipbuilding and Repair regulations

COLOR AND GLOSS LEVEL

- Redbrown, gray, black
- Low sheen

BASIC DATA AT 68°F (20°C)

Data for mixed product	
Number of components	Two
Mass density	12.1 lb/US gal (1.4 kg/l)
Volume solids	72 ± 2%
VOC (Supplied)	max. 1.9 lb/US gal (approx. 222 g/l)
Recommended dry film thickness	5.0 - 8.0 mils (125 - 200 µm) depending on system
Theoretical spreading rate	1161 ft ² /US gal for 1.0 mils (28.8 m ² /l for 25 µm)
Dry to touch	1.5 hours
Overcoating Interval	Minimum: 6 hours Maximum: 48 hours
Full cure after	7 days
Shelf life	Base: at least 12 months when stored cool and dry Hardener: at least 12 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

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RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Previous coat: dry and free from any contamination
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Substrate temperature

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

Mixing ratio by volume: base to hardener 80:20 (4:1)

- Power agitate each component to uniform consistency before combining, then again after combining. DO NOT vary portions
 - When mixing the temperature of the base and hardener should be at least 60°F (15.6°C), otherwise extra thinner may be required
 - Adding too much thinner results in reduced sag resistance
 - Thinner should be added after mixing the components
 - Relative humidity: maximum 85 %
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Induction time

None

Pot life

5 hours at 68°F (20°C)

Note: See ADDITIONAL DATA – Pot life

Air spray

Recommended thinner

THINNER 91-92 or THINNER T-10

Volume of thinner

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

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Airless spray

Recommended thinner

THINNER 91-92 or THINNER T-10

Volume of thinner

0 - 6%, depending on required thickness and application conditions

Nozzle orifice

0.019 – 0.021 in (approx. 0.48 – 0.53 mm)

Nozzle pressure

2400 - 2700 p.s.i. (approx. 166 - 186 bar; 16.5 - 18.6 MPa)

Brush/roller

Recommended thinner

THINNER 91-92 or THINNER T-10

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
5.0 mils (125 µm)	231 ft ² /US gal (5.7 m ² /l)
6.0 mils (150 µm)	192 ft ² /US gal (4.7 m ² /l)
8.0 mils (200 µm)	144 ft ² /US gal (3.5 m ² /l)

Note: Maximum DFT when brushing: 4.0 mils (100 µm)

Overcoating interval for DFT up to 8.0 mils (200 µm)					
Overcoating with...	Interval	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)
PPG antifoulings	Minimum	24 hours	12 hours	6 hours	4 hours
	Maximum	7 days	4 days	48 hours	24 hours

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Curing time for DFT up to 8.0 mils (200 µm)			
Substrate temperature	Dry to touch	Dry to handle	Full cure
41°F (5°C)	4 hours	7 hours	7 days
50°F (10°C)	2.5 hours	5 hours	5 days
59°F (15°C)	2 hours	4.5 hours	4 days
68°F (20°C)	1.5 hours	4 hours	3 days
86°F (30°C)	1 hour	3 hours	48 hours
104°F (40°C)	30 minutes	2 hours	36 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

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| • 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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