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

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

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), otherwhise 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 %

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

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)

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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

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

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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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