

# SIGMACOVER™ 555

## DESCRIPTION

Two-component, polyamide-cured epoxy anticorrosive tiecoat

## PRINCIPAL CHARACTERISTICS

- Final coat in epoxy underwater anticorrosive systems
- Excellent water resistance
- Epoxy anticorrosive with excellent adhesion for antifoulings
- Good abrasion and impact resistance

## COLOR AND GLOSS LEVEL

- Black, gray
- Low sheen

## BASIC DATA AT 20°C (68°F)

Data for mixed product	
<b>Number of components</b>	Two
<b>Mass density</b>	1.4 kg/l (11.7 lb/US gal)
<b>Volume solids</b>	56 ± 2%
<b>VOC (Supplied)</b>	Directive 2010/75/EU, SED: max. 276.0 g/kg max. 387.0 g/l (approx. 3.2 lb/US gal) China GB 38469-2019 (tested) 377.0 g/l (approx. 3.1 lb/gal)
<b>Recommended dry film thickness</b>	75 - 150 µm (3.0 - 6.0 mils) depending on system
<b>Theoretical spreading rate</b>	7.5 m <sup>2</sup> /l for 75 µm (299 ft <sup>2</sup> /US gal for 3.0 mils) 3.7 m <sup>2</sup> /l for 150 µm (150 ft <sup>2</sup> /US gal for 6.0 mils)
<b>Dry to touch</b>	6 hours
<b>Overcoating Interval</b>	Minimum: 8 hours Maximum: 3 days
<b>Full cure after</b>	7 days
<b>Shelf life</b>	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

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## RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

### Substrate conditions

- Previous coat must be dry and free from any contamination

### 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

## INSTRUCTIONS FOR USE

### Mixing ratio by volume: base to hardener 6.14:1

- 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
- Adding too much thinner results in reduced sag resistance and slower cure
- Thinner should be added after mixing the components

### Table of Induction time

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

### Pot life

4 hours at 20°C (68°F)

Note:

- See ADDITIONAL DATA – Pot life



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## **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.)

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## **Brush/roller**

### **Recommended thinner**

THINNER 91-92

### **Volume of thinner**

Up to 5% THINNER 91-92 can be added if desired

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## **Cleaning solvent**

- THINNER 90-53
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## ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
75 µm (3.0 mils)	7.5 m <sup>2</sup> /l (299 ft <sup>2</sup> /US gal)
100 µm (4.0 mils)	5.6 m <sup>2</sup> /l (225 ft <sup>2</sup> /US gal)
150 µm (6.0 mils)	3.7 m <sup>2</sup> /l (150 ft <sup>2</sup> /US gal)

Note:

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

Overcoating interval for DFT up to 150 µm (6.0 mils)								
Overcoating with...	Interval	-5°C (23°F)	0°C (32°F)	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)	40°C (104°F)
PPG antifoulings	Minimum	24 hours	24 hours	24 hours	12 hours	8 hours	6 hours	4 hours
	Maximum	10 days	5 days	5 days	4 days	3 days	3 days	48 hours

Note:

- Surface should be dry and free from any contamination



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Curing time for DFT up to 150 µm (6.0 mils)		
Substrate temperature	Service- water immersion	Full cure
-5°C (23°F)	5 days	N/A
5°C (41°F)	4 days	21 days
10°C (50°F)	48 hours	15 days
20°C (68°F)	24 hours	7 days
30°C (86°F)	18 hours	5 days

Notes:

- In exceptional cases SIGMACOVER 555 may be applied at lower substrate temperatures (down to -15°C (5°F)) provided that the surface is free from ice and other contamination. In such cases special care must be taken to avoid thick film application as this may lead to checking/crazing or solvent entrapment. It should be clear that application at lower temperatures will require additional thinning to obtain application viscosity, however this will affect the sag resistance of the applied coating and can induce solvent retention. Optimal curing and designed product properties will only be achieved when minimum required substrate temperature is reached
- Adequate ventilation must be maintained during application and curing

Pot life (at application viscosity)	
Mixed product temperature	Pot life
5°C (41°F)	8 hours
10°C (50°F)	6 hours
20°C (68°F)	4 hours
30°C (86°F)	2 hours

## SAFETY PRECAUTIONS

- 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
- See Safety Data Sheet and product label for complete safety and precaution requirements

## WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & 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

- Information sheet | Explanation of product data sheets



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