

# New Guard Coatings Group

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# SIGMASHIELD™ 610

## DESCRIPTION

Two-component, amide-cured epoxy coating

## PRINCIPAL CHARACTERISTICS

- Specialized coating for use under SIGMAGLIDE fouling release system
- Excellent water resistance
- Good impact resistance

## COLOR AND GLOSS LEVEL

- Redbrown, blue
- Eggshell

## 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	57 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 331.0 g/kg max. 437.0 g/l (approx. 3.6 lb/US gal)
Recommended dry film thickness	150 µm (6.0 mils)
Theoretical spreading rate	3.8 m <sup>2</sup> /l for 150 µm (152 ft <sup>2</sup> /US gal for 6.0 mils)
Dry to touch	2 hours
Overcoating Interval	Minimum: 6 hours Maximum: 5 days
Full cure after	4 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 - 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 between 10°C (50°F) and 20°C (68°F)
  - Substrate temperature during application and curing should be at least 3°C (5°F) above dew point
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## **INSTRUCTIONS FOR USE**

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

- The temperature of the mixed base and hardener should be above 10°C (50°F), otherwise extra thinner may be required to obtain application viscosity
  - Adding too much thinner results in reduced sag resistance
  - Thinner should be added after mixing the components
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### **Induction time**

None

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### **Pot life**

4 hours

Note: See ADDITIONAL DATA – Pot life

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### **Air spray**

#### **Recommended thinner**

THINNER 91-92

#### **Volume of thinner**

0 - 10%, 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 - 10%, depending on required thickness and application conditions

### Nozzle orifice

Approx. 0.53 – 0.69 mm (0.021 – 0.027 in)

### Nozzle pressure

15.0 MPa (approx. 150 bar; 2176 p.s.i.)

## Brush/roller

### Recommended thinner

THINNER 91-92

### Volume of thinner

0 – 5%

## Cleaning solvent

THINNER 90-53

## ADDITIONAL DATA

Overcoating interval for DFT up to 150 µm (6.0 mils)				
Overcoating with...	Interval	10°C (50°F)	15°C (59°F)	20°C (68°F)
SIGMAGLIDE 790	Minimum	16 hours	10 hours	6 hours
	Maximum	7 days	6 days	5 days

Note: Surface should be dry and free from any contamination

Curing time for DFT up to 150 µm (6.0 mils)			
Substrate temperature	Dry to touch	Dry to handle	Full cure
10°C (50°F)	3 hours	6 hours	7 days
15°C (59°F)	2 hours	4 hours	5 days
20°C (68°F)	2 hours	3 hours	4 days

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

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Pot life (at application viscosity)	
Mixed product temperature	Pot life
10°C (50°F)	7 hours
20°C (68°F)	4 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
• CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490
• PPG PROTECTIVE & MARINE COATINGS' GENERAL WORKING PROCEDURES FOR APPLICATION OF SIGMAGLIDE®		

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