New Guard Coatings Group

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This information is not exhaustive and it is the user's responsibility to ensure that this data sheet is the most current by contacting their local New Guard Coatings Group branch prior to using the coating/product.

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^2/l for 150 µm (152 ft^2/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

SIGMASHIELD™ 610

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

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

Induction time

None

Pot life

4 hours

Note: See ADDITIONAL DATA – Pot life

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.)

SIGMASHIELD™ 610

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)

SIGMASHIELD™ 610

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®		

WARRANTY

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SIGMASHIELD™ 610

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