



New Guard Coatings Group

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SIGMASHIELD™ 620

DESCRIPTION

Two-component high solids amine cured epoxy coating

PRINCIPAL CHARACTERISTICS

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

COLOR AND GLOSS LEVEL

- Redbrown, blue
- Gloss

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.6 kg/l (13.4 lb/US gal)
Volume solids	85 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 150.0 g/kg max. 235.0 g/l (approx. 2.0 lb/US gal)
Recommended dry film thickness	150 µm (6.0 mils)
Theoretical spreading rate	5.7 m ² /l for 150 µm (227 ft ² /US gal for 6.0 mils)
Dry to touch	3 hours
Overcoating Interval	Minimum: 6 hours Maximum: 5 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

Substrate temperature and application conditions

- Substrate temperature during application and curing should be above 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 75:25 (3:1)

- The temperature of the mixed base and hardener should preferably be above 20°C (68°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

Induction time

None

Pot life

1.5 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

Airless spray

Recommended thinner

No thinner should be added

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

No thinner should be added

Cleaning solvent

THINNER 90-53

ADDITIONAL DATA

Overcoating interval for DFT up to 150 µm (6.0 mils)				
Overcoating with...	Interval	20°C (68°F)	30°C (86°F)	40°C (104°F)
SIGMAGLIDE 790	Minimum	6 hours	4 hours	2 hours
	Maximum	5 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	Dry to handle	Service- water immersion	Full cure
20°C (68°F)	3.5 hours	5 days	7 days
30°C (86°F)	2 hours	4 days	5 days
40°C (104°F)	1.5 hours	3 days	3 days

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

Pot life (at application viscosity)

Mixed product temperature	Pot life
20°C (68°F)	1.5 hours
30°C (86°F)	45 minutes

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

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