



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.

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SIGMAFAST™ 213

DESCRIPTION

Two-component, high-build, polyamine-cured vinyl epoxy primer

PRINCIPAL CHARACTERISTICS

- Epoxy primer or buildcoat in protective coating systems for steel structures in atmospheric exposure
- Tough, with long-term flexibility
- Cures at temperatures down to -5°C (23°F)
- Fast-drying and handling

COLOR AND GLOSS LEVEL

- Gray, yellow
- Flat

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.5 kg/l (12.5 lb/US gal)
Volume solids	60 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 235.0 g/kg UK PG 6/23(92) Appendix 3: max. 345.0 g/l (approx. 2.9 lb/US gal)
Recommended dry film thickness	80 - 180 µm (3.1 - 7.1 mils) depending on system
Theoretical spreading rate	7.5 m ² /l for 80 µm (310 ft ² /US gal for 3.1 mils) 3.3 m ² /l for 180 µm (136 ft ² /US gal for 7.1 mils)
Dry to touch	50 minutes
Overcoating Interval	Minimum: 45 minutes Maximum: 12 months
Shelf life	Base: at least 12 months when stored cool and dry Hardener: at least 16 months when stored cool and dry

Notes:

- See ADDITIONAL DATA - Spreading rate and film thickness
- See ADDITIONAL DATA - Overcoating intervals

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Steel; blast cleaned to ISO-Sa2½, blasting profile 40 - 70 µm (1.6 - 2.8 mils)
- Previous coat must be sound, dry and free from any contamination



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Substrate temperature

- 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
 - Relative humidity during application and curing should not exceed 85%
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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 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
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Induction time

15 minutes at 20°C (68°F)

Pot life

6 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

Air spray

Recommended thinner

THINNER 21-06

Volume of thinner

20 - 30%, depending on required thickness and application conditions

Nozzle orifice

1.5 - 3.0 mm (approx. 0.060 - 0.110 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 21-06

Volume of thinner

20 - 30%, depending on required thickness and application conditions

Nozzle orifice

Approx. 0.48 mm (0.019 in)

Nozzle pressure

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

Brush/roller

Recommended thinner

THINNER 21-06

Volume of thinner

0 - 5%

Cleaning solvent

THINNER 90-53

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
80 µm (3.1 mils)	7.5 m ² /l (310 ft ² /US gal)
100 µm (4.0 mils)	6.0 m ² /l (241 ft ² /US gal)
180 µm (7.1 mils)	3.3 m ² /l (136 ft ² /US gal)

Overcoating interval for DFT up to 80 µm (3.1 mils)					
Overcoating with...	Interval	0°C (32°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)
recommended topcoats	Minimum	3 hours	1.5 hours	45 minutes	25 minutes
	Maximum	12 months	12 months	12 months	12 months



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Overcoating interval for DFT up to 150 µm (6.0 mils)					
Overcoating with...	Interval	0°C (32°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)
recommended topcoats	Minimum	4.5 hours	2.5 hours	1 hour	35 minutes
	Maximum	12 months	12 months	12 months	12 months

Note: Surface should be dry and free from any contamination

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

• CONVERSION TABLES	INFORMATION SHEET	1410
• 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
• SPECIFICATION FOR MINERAL ABRASIVES	INFORMATION SHEET	1491
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

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