New Guard Coatings Group

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April 18, 2018 (Revision of February 16, 2016)

SIGMAFAST™ 205 LT

DESCRIPTION

Two-component, high-build, polyamide-cured zinc phosphate epoxy primer/coating

PRINCIPAL CHARACTERISTICS

- General-purpose epoxy primer/coating for atmospheric conditions
- Good drying and curing property at low temperatures down to –5°C (23°F)
- Easy application by airless spray
- Recoatable with most two-component epoxy and polyurethane coatings
- Tough, with long-term flexibility

COLOR AND GLOSS LEVEL

- A wide range of colors
- Semi-gloss

BASIC DATA AT 10°C (50°F)

Data for mixed product	
Number of components	Two
Mass density	1.4 kg/l (11.7 lb/US gal)
Volume solids	70 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 213.0 g/kg UK PG 6/23(92) Appendix 3: max. 310.0 g/l (approx. 2.6 lb/US gal)
Recommended dry film thickness	75 - 150 µm (3.0 - 6.0 mils) depending on system
Theoretical spreading rate	9.3 m^2/l for 75 µm (374 ft^2/US gal for 3.0 mils) 4.7 m^2/l for 150 µm (187 ft^2/US gal for 6.0 mils)
Dry to touch	3 hours
Overcoating Interval	Minimum: 3 hours Maximum: 6 months
Full cure after	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 – Spreading rate and film thickness
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Steel; blast cleaned to ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)

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Concrete

- Dried for at least 28 days in good ventilation conditions
- Moisture content should not exceed 4.5%
- Concrete must be free from laitance and any contamination
- Rough surface; eventually abraded by power tool or diamond abrading tool

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

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 15°C (59°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

Pot life

6 hours at 10°C (50°F)

Note: See ADDITIONAL DATA – Pot life

Air spray

Recommended thinner

THINNER 91-92

Volume of thinner

5 - 10%, 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 91-92

Volume of thinner
5 - 10%, 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 91-92

Volume of thinner
0 – 5%

Cleaning solvent
THINNER 90-53

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	**Theoretical spreading rate**
75 µm (3.0 mils)	9.3 m^2/l (374 ft^2/US gal)
100 µm (4.0 mils)	7.0 m^2/l (281 ft^2/US gal)
150 µm (6.0 mils)	4.7 m^2/l (187 ft^2/US gal)

Overcoating interval for DFT up to 75 µm (3.0 mils)						
Overcoating with...	**Interval**	**-5°C (23°F)**	**0°C (32°F)**	**5°C (41°F)**	**10°C (50°F)**	**20°C (68°F)**
various two-pack epoxy and polyurethane coatings	Minimum Maximum	22 hours 6 months	16 hours 6 months	5 hours 6 months	3 hours 6 months	2 hours 6 months

Note: Surface should be dry and free from any contamination

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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)**
various two-pack epoxy and polyurethane coatings	Minimum Maximum	24 hours 6 months	18 hours 6 months	6 hours 6 months	4 hours 6 months	3 hours 6 months

Note: Surface should be dry and free from any contamination

Curing time for DFT up to 75 µm (3.0 mils)			
Substrate temperature	**Dry to touch**	**Dry to handle**	**Full cure**
-5°C (23°F)	18 hours	21 hours	20 days
0°C (32°F)	15 hours	18 hours	12 days
5°C (41°F)	4 hours	7 hours	6 days
10°C (50°F)	3 hours	5 hours	5 days
20°C (68°F)	2 hours	3 hours	48 hours

Curing time for DFT up to 150 µm (6.0 mils)			
Substrate temperature	**Dry to touch**	**Dry to handle**	**Full cure**
-5°C (23°F)	20 hours	24 hours	21 days
0°C (32°F)	16 hours	20 hours	14 days
5°C (41°F)	5 hours	8 hours	7 days
10°C (50°F)	4 hours	6 hours	6 days
20°C (68°F)	3 hours	4 hours	3 days

Note: Adequate ventilation must be maintained during application and curing

Pot life (at application viscosity)	
Mixed product temperature	**Pot life**
10°C (50°F)	6 hours
20°C (68°F)	4 hours
30°C (86°F)	1.5 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

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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
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650

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