January 30, 2024 (Revision of December 10, 2021)

FREITAPOX SR 213 EVO

DESCRIPTION

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

PRINCIPAL CHARACTERISTICS

- Epoxy primer or buildcoat in protective coating systems for steel structures in atmospheric exposure
- Cures at temperatures down to -5°C (23°F)
- Fast-drying and handling
- ACQPA 32281-certified

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 2010/75/EU, 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	70 - 180 µm (2.8 - 7.1 mils) depending on system
Theoretical spreading rate	8.6 m^2/l for 70 µm (344 ft^2/US gal for 2.8 mils) 3.3 m^2/l for 180 µm (136 ft^2/US gal for 7.1 mils)
Dry to touch	50 minutes
Dry to handle	1 hour
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%
- Substrate temperature during application should not exceed 40°C (104°F)

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

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. 0.43 – 0.53 mm (0.017 – 0.021 in)

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

Brush/roller

- For small areas only (touch up and repair)
- Roller application is not recommended

Recommended thinner
THINNER 21-06

Volume of thinner
0 – 5%

Cleaning solvent
THINNER 90-53 or THINNER 21-06

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	**Theoretical spreading rate**
70 µm (2.8 mils)	8.6 m^2/l (344 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 70 µm (2.8 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 Maximum	4.5 hours 12 months	2.5 hours 12 months	1 hour 12 months	35 minutes 12 months

Note: Surface should be dry and free from any contamination

Curing time for DFT up to 70 µm (2.8 mils)		
Substrate temperature	**Dry to touch**	**Dry to handle**
0°C (32°F)	80 minutes	180 minutes
10°C (50°F)	50 minutes	90 minutes
20°C (68°F)	30 minutes	45 minutes
30°C (86°F)	20 minutes	25 minutes

Curing time for DFT up to 150 µm (6.0 mils)		
Substrate temperature	**Dry to touch**	**Dry to handle**
0°C (32°F)	100 minutes	270 minutes
10°C (50°F)	70 minutes	135 minutes
20°C (68°F)	50 minutes	65 minutes
30°C (86°F)	35 minutes	35 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.

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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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