FREITAPOX SR 213

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

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

FREITAPOX SR 213

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 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

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.)

FREITAPOX SR 213

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)

FREITAPOX SR 213

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

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

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

- See Safety Data Sheet and product label for complete safety and precaution requirements
- 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

FREITAPOX SR 213

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & 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

- Information sheet | Explanation of product data sheets

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at www.ppgpmc.com. The English text of this sheet shall prevail over any translation thereof.