SIGMA EP 110 PRIMER

DESCRIPTION

Two-component, zinc phosphate blast primer/sealer

PRINCIPAL CHARACTERISTICS

- Excellent rust preventing properties in industrial or coastal atmospheres
- Cures at temperatures down to 5°C (41°F)
- Excellent adhesion to steel
- Epoxy blast primer for steel
- Registered as Highway Agency item 110
- Approved Network Rail RT 98 item 7.1.2

COLOR AND GLOSS LEVEL

- Buff BS 08C35
- Eggshell

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.4 kg/l (11.7 lb/US gal)
Volume solids	43 ± 2%
VOC (Supplied)	UK PG 6/23(92) Appendix 3: max. 554.0 g/l (approx. 4.6 lb/US gal)
Recommended dry film thickness	25 - 50 µm (1.0 - 2.0 mils) depending on system
Theoretical spreading rate	17.2 m^2/l for 25 µm (690 ft^2/US gal for 1.0 mils)
Dry to touch	20 minutes
Overcoating Interval	Minimum: 4 hours Maximum: 3 months
Full cure after	5 days
Shelf life	Base: at least 12 months when stored cool and dry Hardener: at least 12 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 50 – 100 µm (2.0 – 4.0 mils)
- Galvanized steel; pretreated with SIGMA ETCH

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Substrate temperature and application conditions

- Substrate temperature during application and curing down to 5°C (41°F) is acceptable
- 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%

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 and slower cure
- Thinner should be added after mixing the components

Induction time

None

Pot life

8 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

Air spray

Recommended thinner

THINNER 91-92

Volume of thinner

0 - 5%, 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
0 - 5%, depending on required thickness and application conditions

Nozzle orifice
Approx. 0.43 - 0.58 mm (0.017 - 0.023 in)

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

Brush/roller

Recommended thinner
THINNER 91-92

Cleaning solvent
THINNER 90-53

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	**Theoretical spreading rate**
25 µm (1.0 mils)	17.2 m^2/l (690 ft^2/US gal)
35 µm (1.4 mils)	12.3 m^2/l (493 ft^2/US gal)
50 µm (2.0 mils)	8.6 m^2/l (345 ft^2/US gal)

Overcoating interval for DFT up to 50 µm (2.0 mils)				
Overcoating with...	**Interval**	**10°C (50°F)**	**20°C (68°F)**	**30°C (86°F)**
itself	Minimum	8 hours	4 hours	3 hours
	Maximum	3 months	3 months	2 months

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Curing time for DFT up to 50 µm (2.0 mils)			
Substrate temperature	**Dry to touch**	**Dry to handle**	**Full cure**
10°C (50°F)	40 minutes	2 hours	7 days
20°C (68°F)	20 minutes	1 hour	5 days
30°C (86°F)	15 minutes	30 minutes	3 days

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

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
• CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490

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