SIGMAZINC™ 102 G

DESCRIPTION

Two-component, high solids polyamide cured zinc rich epoxy primer

PRINCIPAL CHARACTERISTICS

- High build anticorrosive zinc epoxy primer
- Designed as a system primer for various paint systems
- Quick-drying, can be overcoated after a short interval
- Complies with the compositional requirements of SSPC-Paint 20, Level 3

COLOR AND GLOSS LEVEL

- Gray, reddish gray

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.9 kg/l (15.9 lb/US gal)
Volume solids	72 ± 2%
VOC (Supplied)	Directive 2010/75/EU, SED: max. 122.0 g/kg max. 236.0 g/l (approx. 2.0 lb/US gal)
Recommended dry film thickness	60 - 150 µm (2.4 - 6.0 mils) depending on system
Theoretical spreading rate	11.7 m^2/l for 60 µm (468 ft^2/US gal for 2.4 mils)
Dry to touch	20 minute
Overcoating Interval	Minimum: 2 hours Maximum: 3 months
Full cure after	7 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

Immersion exposure

- Steel; shot blast cleaned to ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)
- Steel with approved zinc silicate shop primer; sweep blasted to SPSS-Ss

SIGMAZINC™ 102 G

Atmospheric exposure conditions

- Steel; blast cleaned to ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)
- Steel with approved zinc silicate shop primer; sweep blasted to SPSS-Ss or power tool cleaned to SPSS-Pt3

Substrate temperature and application conditions

- Substrate temperature during application and curing should be above 5°C (41°F)
- 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 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

Pot life

2.5 hours at 20°C (68°F)

Air spray

Recommended thinner

THINNER 91-92

Volume of thinner

5 - 15%, depending on required thickness and application conditions

Nozzle orifice

1.8 – 2.2 mm (approx. 0.070 – 0.087 in)

Nozzle pressure

0.3 - 0.6 MPa (approx. 3 - 6 bar; 44 - 87 p.s.i.)

SIGMAZINC™ 102 G

Airless spray

Recommended thinner

THINNER 91-92

Volume of thinner

0 - 10%, depending on required thickness and application conditions

Nozzle orifice

Approx. 0.43 – 0.48 mm (0.017 – 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 – 10%

Cleaning solvent

- THINNER 90-53

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	**Theoretical spreading rate**
60 µm (2.4 mils)	11.7 m^2/l (468ft^2/US gal)
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)

SIGMAZINC™ 102 G

Overcoating interval for DFT up to 100 µm (4.0 mils)						
Overcoating with...	**Interval**	**5°C (41°F)**	**10°C (50°F)**	**20°C (68°F)**	**30°C (86°F)**	**40°C (104°F)**
subsequent coating	Minimum	6 hour	4 hours	2 hours	1 hours	30 minutes
	Maximum	3 months	3 months	3 months	3 months	3 months

Notes:

- Zinc rich primers can form zinc salts on the surface; preferably they should not be weathered for long periods before overcoating
- Before overcoating any visible surface contamination must be removed by high-pressure water cleaning, sand washing, sweep blasting or mechanical cleaning
- In clean exterior conditions, a maximum interval of 3 months can be tolerated, but in industrial or marine conditions this interval should be reduced to the practical minimum

Curing time for DFT up to 100 µm (4.0 mils)			
Substrate temperature	**Full cure**	**Dry to touch**	**Dry to handle**
5°C (41°F)	20 days	1.5 hours	6 hours
10°C (50°F)	15 days	1 hours	4 hours
15°C (59°F)	10 days	40 minutes	3 hours
20°C (68°F)	7 days	20 minutes	2 hours
30°C (86°F)	5 days	10 minutes	1 hours

Note:

- Adequate ventilation must be maintained during application and curing

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

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

SIGMAZINC™ 102 G

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