

SIGMAZINC™ 19

DESCRIPTION

One-component, zinc-rich epoxy primer

PRINCIPAL CHARACTERISTICS

- Good anticorrosive properties, the dry film contains 90% zinc by weight
- Designed for repair of two-component zinc epoxy primers and zinc silicate primers
- Can be used as a reconditioner for aged, derusted, galvanized steel
- Dries at temperatures down to -10°C (14°F)
- Dry heat resistance 125°C (260°F) with peaks up to 175°C (350°F)
- The superimposed system must be unsaponifiable
- Quick-drying, can be overcoated after a short interval

COLOR AND GLOSS LEVEL

- Gray
- Flat

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	One
Mass density	2.4 kg/l (20.0 lb/US gal)
Volume solids	38 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 246.0 g/kg max. 584.0 g/l (approx. 4.9 lb/US gal)
Recommended dry film thickness	35 µm (1.4 mils)
Theoretical spreading rate	10.9 m ² /l for 35 µm (435 ft ² /US gal for 1.4 mils)
Dry to touch	4 minutes
Overcoating Interval	Minimum: 2 hours Maximum: Extended
Shelf life	At least 9 months when stored cool and dry

Notes:

- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time

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RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Steel; blast cleaned to ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)
- Aged hot-dip galvanized steel with rusty spots; thoroughly derusted to ISO-St3 or ISO-Sa2½, blasting profile 40 – 70 µm (1.6 – 2.8 mils)
- Zinc rich epoxies and zinc silicates must be dry and free from any contamination

Substrate temperature

- Substrate temperature during application at -10°C (14°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

- Stir well before use
- The temperature of the paint 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
- Adequate ventilation must be maintained during application and curing (please refer to INFORMATION SHEETS 1433 and 1434)

Air spray

Recommended thinner

THINNER 91-79

Volume of thinner

20 - 25%, depending on required thickness and application conditions

Nozzle orifice

1.5 – 3.0 mm (approx. 0.060 – 0.110 in)

Nozzle pressure

0.2 - 0.3 MPa (approx. 2 - 3 bar; 29 - 44 p.s.i.)

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Airless spray

Recommended thinner

THINNER 91-79

Volume of thinner

20 - 25%, depending on required thickness and application conditions

Nozzle orifice

Approx. 0.43 mm (0.017 in)

Nozzle pressure

10.0 - 15.0 MPa (approx. 100 - 150 bar; 1451 - 2176 p.s.i.)

Brush/roller

Recommended thinner

THINNER 91-79

Volume of thinner

0 - 3%

Cleaning solvent

THINNER 90-53

ADDITIONAL DATA

Overcoating interval for DFT up to 35 µm (1.4 mils)					
Overcoating with...	Minimum	-10°C (14°F)	5°C (41°F)	10°C (50°F)	20°C (68°F)
various two-component epoxy coatings	Minimum	6 hours	4 hours	3 hours	2 hours
	Maximum	Extended	Extended	Extended	Extended

Notes:

- Zinc rich primers can form zinc salts on the surface; preferably they should not be weathered for long periods before overcoating
- An interval of several months can be allowed under clean interior exposure conditions
- In clean exterior conditions, a maximum interval of 14 days can be tolerated, but in industrial or marine conditions this interval should be reduced to the practical minimum
- Before overcoating visible surface contamination must be removed by high-pressure water cleaning, sweep blasting or mechanical cleaning
- When a long overcoating interval is required, it is recommended to overcoat SIGMAZINC 19 as soon as possible with a suitable sealer coat

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Curing time for DFT up to 35 µm (1.4 mils)

Substrate temperature	Dry to touch
10°C (50°F)	30 minutes
15°C (59°F)	5 minutes
20°C (68°F)	4 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.

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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