

New Guard Coatings Group

A global reputation to protect.

You have acquired this data sheet from the New Guard Coatings Group.

All information listed is correct at the time of print.



uksales@newguardcoatings.com



+44 1937 586311

Global Head Office: New Guard Coatings Ltd, Sandbeck Way, Wetherby, Leeds, LS22 7DN



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

SIGMAZINC™ 19

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.)

SIGMAZINC™ 19

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

SIGMAZINC™ 19

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

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.

SIGMAZINC™ 19

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.

The PPG logo, and all other PPG marks are property of the PPG group of companies. All other third-party marks are property of their respective owners.

