



# BERGER Protecton PROTECTIVE COATINGS

## Zinc Anode 304 Inorganic Zinc Silicate Coating

### USES

Recommended for use on steel structures, bridges, interior and exterior of storage tanks, bulk handling equipment, pipelines etc. Extensively used as new construction primer in fertilizers, petrochemicals, chemical industries, thermal and nuclear power plants as well as other installations exposed to saline and highly corrosive environments.

### SCOPE

A two pack self curing solvent based inorganic Zinc Silicate Primer with an extensive service record as a single coat system or in conjunction with suitable top coats. Zinc Anode 304 provides outstanding cathodic protection to steel surfaces, preventing corrosion from the most aggressive weathering conditions. It provides a tough, abrasion resistant film unaffected by weather, sunlight, fresh or salt water spray or extreme temperature. It is however, not recommended for contact with strong acids or alkalis of pH below 5 or exceeding 10. The coating attains water resistance within 30 minutes of application and is unaffected by rain, condensation or dew.

### PRODUCT DATA

**Type :** Two Pack, self cured

**Composition :** Ethyl Silicate/Metallic Zinc

**Mixing Ratio :** Part A : Part B – 35 : 65 by weight

**Pot Life :** 4–6 hours

**Application :** Conventional and Airless Spray.  
Brush for small areas.

**Recommended DFT :** 65–75 microns per coat

**Corresponding WFT :** 108–125 microns per coat

**Theoretical Spreading Rate :** 8.0–9.2 Sq. Mtr./Ltr.

**Drying Time :**

TOUCH : 30 minutes  
HANDLE : 3–4 hours  
HARD : Overnight

**Curing Time :** 6–7 days

**Overcoating Interval :**

MIN : Overnight  
MAX : Indefinite

**Flash Point :** Above 22° C

**Colour :** Grey

**Finish :** Matt

**Packing :** 25 Ltrs.

**Thinner/Cleaner :** Thinner 870

**Storage Life :** Upto six months as long as the sealed containers are kept under cover in a dry place under normal temperature conditions.

### RESISTANCE GUIDE

**Chemical Resistance (with proper top coat) :**

EXPOSURES	SPLASH & SPILLAGE	MILD FUMES / OUTDOOR RESISTANCE
Acids	Very Good	Excellent
Alkalis	Very Good	Excellent
Solvents	Excellent	Excellent
Salt	Excellent	Excellent
Water	Excellent	Excellent

**Note :** The product is suitable for sustained immersion in salt and sea water with appropriate top coats.

**Temperature Resistance :**

Continuous : 400° C  
Intermittent : 426° C

**Weatherability :** Excellent

**Flexibility :** Fair to Good

**Abrasion Resistance :** Excellent - increases with age

**SURFACE PREPARATION**

Remove grease, oil and other contaminants preferably by using Bison Degreasing Solvent. Blast clean to a minimum of Sa 2 1/2 Swedish Standard SIS 05 5900 with a surface profile not exceeding 35–40 microns.

The surface should be clean and dry before application of Zinc Anode 304.

**APPLICATION**

Stir Part A thoroughly to a uniform consistency. Weigh out the components in the recommended proportion and slowly add Part B (Zinc Dust) to Part A with constant stirring – preferably with a mechanical stirrer. Continue stirring until the powder is thoroughly dispersed. Strain the mixture through a 80 mesh sieve. Allow the mixture to mature for 15–20 minutes before application. Stir again before use and from time to time during application.

**Conventional Spray :** Add upto 5% Thinner 870 depending on conditions. Use any standard pressure pot equipment at an atomising pressure of 3.5–4.4 Kg/cm<sup>2</sup>.

**Airless Spray :** Apply without thinning. Use any standard equipment having pump ratio 30 : 1. Tip size 0.38–0.43 mm. Tip pressure 110–160 Kg/cm<sup>2</sup>.

**TYPICAL PAINTING SPECIFICATIONS**

Surface	1st Coat	2nd Coat	3rd Coat	4th Coat
Steel	Zinc Anode 304	Epilux 4 HB MIO	Epilux 4 CR Enamel or Epilux 155 HB or Epilux 89 HB	Epilux 4 CR Enamel or Epilux 155 HB or Epilux 89 HB
-do-	-do-	Epilux 5 CTE or Epilux 555 CTE HB	Epilux 5 CTE or Epilux 555 CTE HB	
-do-	-do-	Linisol HB MIO	Linisol C/R Paint or Linisol CR HB	Linisol C/R Paint or Linisol CR HB
-do-	-do-	Epilux 610 Primer	Epoxy PU HB or Bergerthane	Epoxy PU HB or Bergerthane
-do-	-do-	Lumeros HR/47 or Silicone Acrylic HR Coating	Lumeros HR/47 or Silicone Acrylic HR Coating	

**OVERCOATING OF ZINC ANODE 304**

- It must be fully cured and free from residual solvent before overcoating. This normally takes 16–24 hours but time may be extended under conditions of humidity below 80%.
- While overcoating, a mist coat should first be applied to avoid bubbling which appears due to air entrapment.

**Notes :**

1. Use off the mixed paint within the stipulated pot life period.
2. Zinc Anode 304 cures by reaction with moisture and may be applied at high humidity provided the blasted surface itself is free from condensation and meets the requirements of Sa 2 1/2 Swedish Standard.
3. Application equipment should be cleaned with Thinner 870 otherwise they are likely to be damaged.
4. At lower relative humidity, drying and curing are likely to be extended.
5. Damaged areas can be touched up with Epilux 4 Zinc Rich Primer.
6. The product is based on VALSPAR/MOBIL, USA technology and is in line with VALSPAR MZ-7 Inorganic Zinc Rich.

**Health & Safety :** Please refer to the separate Safety Data Sheet available with detailed information.

**DISCLAIMER**

The information contained within this Data Sheet is based on information believed to be reliable at the time of its preparation. The Company will not be liable for loss or damage howsoever caused including liability for negligence, which may be suffered by the user of the data contained herein. It is the users' responsibility to conduct all necessary tests to confirm the suitability of any product or system for their intended use. No guarantee of results is implied since conditions of use are beyond our control.

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