



# Technical Data Sheet

## Zincodic Extreme 80 1K MC



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## Zincodic Extreme 80 1K MC

### Product description

**Zincodic Extreme 80 1K MC** is a stand-alone polyurethane coating with excellent anti-staining and abrasive properties. Zincodic Extreme 80 1K MC has 85% (+/- 2%) zinc in the dry film layer (DFT), giving the coating excellent cathodic protection characteristics. Zincodic Extreme 80 1K MC is specially formulated to be a non-isocyanate, no VOC, no HAP, no BPA/F, and non-flammable single application standalone user-friendly coating. Zincodic Extreme 80 1K MC is designed to be used in outdoor and indoor applications requiring low toxicity and high durability.

### Typical applications

Mining equipment, marine and offshore environments, structural steel, towers, refineries, power plants, pipelines, pumps, generators, bridges, buildings, storage tanks, chemical plants, refurbishing of HDG substrates, HDG duplex coating and/or refurbishing of corrugated iron/galvanised roofing, and general structural engineering. Highly suitable for coastal high humidity conditions or application requiring corrosivity categories up to and including C5H and IM3 as per ISO 12944 standards.

### Product specifications

• Solids by Volume	82% (+/- 1%)
• SG	2.5 (+/- 0.1)
• Zinc Content (DFT)	85% (+/- 2%)
• Zinc purity	98%
• D-Shore Hardness	92 (+/-) 2 ASTM D2240
• Maximum Working Temp	250°C
• VOC	Nil
• Flash Point	>70 °C
• Colour	RAL 7005
• Packaging	12.5 kg pail
• Theoretical coverage per pail	56 m <sup>2</sup> @ 75 µm DFT

### Surface preparation

Ensure all surfaces are assessed and treated in accordance with SSPC-SP1 solvent cleaning standards.

Surface to be free of oil, grease, dust, dirt, moisture, and any other foreign matter or contaminants.

Commercial blast according to SSPC-SP10/Sa2.5 to a minimum blast profile of 75µm  
Non-visible salt tolerance to be less than 7µg/cm<sup>2</sup> (recommended 5 µg/cm<sup>2</sup>),

All sharp edges to be rounded. Welds, edges, and holes to be stripe coated.

May be applied on non-friable rust substrates (contact the technical dept).

May be applied on new or old galvanised steel substrates. (contact the technical dept).

Optimum coating performance will only be achieved with the correct surface preparation.

If in doubt, contact the technical division for a protocol of application.

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## Application

### Application methodology

- Brush,
- Short hair or sponge roller.
- Gravity fed spray gun, minimum nozzle size 1.6mm
- Spray pot – Self agitating recommended
- Airless – Nozzle size 15 to 28 thou with a minimum pump ratio of 40:1
- Electrostatic gun

## Mixing

### Mixing methodology

Remove seal and locking ring. Open pail by using a 50mm scraper tapping around the circumference of the lid until it pops off. Mix using a standard 50 to 75mm spiral mixer. Mix for 3 to 5 minutes until a homogeneous coating is obtained.

## Pot Life

This is a moisture cure product so pot-life will depend on the relative humidity and ambient temperature. If using small quantities, then re-seal the pot immediately to prevent moisture reacting with the coating.

## Solvent

**ZincSolv-B** - Note: **If required** add 2% to 5% to the pail. Adding ZincSolv-B will dilute the coating thereby adjusting the viscosity for spray application. Always test the dilution before use.

## Curing time:

Touch dry	3 hours at 21°C %RH < 50
Transport ready	24 hours at 21°C %RH < 50
Full cure	12-15 days at 21°C %RH < 50

Drying and curing time will depend on temperature, relative humidity, and coating thickness.

## Over coating time

3 hours or until touch dry- (may be slightly tacky)

**Touch dry** – the state of drying when slight finger pressure does not leave any imprint or reveal any tackiness.

## Environmental conditions

Application temperature	- 5°C to 40°C (23 °F to 104 °F)
Application humidity	< 85°C (185 °F)
Substrate temperature	> 3°C (37.4 °F) above dew point.

## Duplex coating time

Minimum overcoating, see “ Over coating time”

Maximum overcoating time 24 hours.

**Note:** For duplex coating, do not use any Alkyd based coatings. Always test product compatibility before duplex coating.

## Coating thickness

May be applied up to 150µm WFT (Wet Film Thickness) per single coat.

Apply 2<sup>nd</sup> or 3<sup>rd</sup> coating to achieve final required DFT.

May be applied up to a DFT of 375µm

DFT application should be in accordance with ASTM-A123 standards for material thickness, and according to ISO 12944-2 standard for environmental conditions.

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## Storage

Keep sealed containers in a well-ventilated cool dry area as per local authority, regional and international regulations.

Keep away from direct sunlight, heat, and acids.

Avoid excessive vibration.

Storage temp: 5°C to 30°C (41 °F to 86 °F)

Shelf-life: 12 months from date of manufacture, if unopened and stored correctly.

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## Disposal

Dispose of contents and or containers to an approved waste disposal plant in accordance with local, regional, national, and international regulations.

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## **Health and Safety**

Please ensure good practice is observed at all times. Protective gloves, goggles & a disposable coverall must be worn during the mixing and application of this product. Before mixing and applying the material ensure you have read and understood the fully detailed Safety Data Sheet.

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## **Legal Notice:**

The data contained within this Technical Data Sheet is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine if the product is suitable for use. Zincodic (Pty) Ltd accepts no liability arising out of the use of this information or the product described herein.