

I-Zinc

Primer



DESCRIPTION

Two component solvented zinc rich inorganic coating, based on an ethyl silicate binder – the zinc component is incorporated prior to use and the mixture reacts with the atmospheric moisture, converting to a dense, inorganic coating of a Si/Zn/Si matrix

INTENDED USE

An inorganic zinc rich primer providing excellent protection to steel substrates, for use under a wide range of high performance topcoat systems in corrosive environments such as exposed steelwork, bridges, tanks, pipe work – including offshore and onshore environments – oil production platforms and refineries

PRODUCT FEATURES

- Provides long-term corrosion protection to structural steel and prior to top coating in the field
- Used in construction as a fast drying primer
- Can be applied in a wide range of temperatures including low temperatures
- Suitable for steel structures, ship building, mechanical and automotive engineering, transportation and the protection of buildings in chemical plants, coastal and marine environments
- Excellent abrasion resistance – scratches caused by handling damage continue to be protected by the high zinc content in the surrounding paint
- High heat resistant up to 400°C

PACKAGING

- 10 Litre Kit

STANDARD COLOUR AVAILABILITY

Metallic Pink



PRODUCT INFORMATION

- **Number of Components:** 2
- **Zinc % in dry film:** 85%
- **Zinc Grain Size:** Average 5.4mm
- **Density:** 2.5 kg/litre
- **Volume Solids:** 33%
- **Pot Life:** 8 hours @ 25°C
- **Film Thickness:** Wet - 100µm
Dry - 50µm
- **Spreading Rate:** 5m² /lt @ 75µm DFT
- **Temperature Resistance:** Dry 400°C
- **Viscosity:** 20 sec ford cup 4

Mixing ratio for 10 Litre pack **7.97 litres** of liquid component to **15.2kg** zinc powder component

LIMITATIONS

- The surface develops an alkali nature with time and therefore is not suitable for alkyd or oil-based topcoats the product only adheres to freshly abrasive blast cleaned steel.
- The product requires continuous agitation during application to keep the zinc in suspension.
- Temperature and humidity effects cure rate. Curing will be slow at relative humidity below 40%. This can be accelerated by water spraying after 3 hours drying time.
- Sufficient time, governed by the prevailing relative humidity, must be allowed to achieve full cure. Curing can be checked using the MEK solvent resistance method – prior to the application of topcoats.
- Not resistant to acids or alkali outside the pH range of 5 to 10.
- The surface develops an alkali nature with time and therefore is not suitable for alkyd or oil-based topcoats.
- Cannot be over-coated with itself. Use zinc rich epoxies to repair e.g. *Speccoats Zincfix* and *Speccoats E-Zinc Primer*



SURFACE PREPARATION

- Degrease surfaces with **Speccoats Hydrosolve** followed by a high pressure water rinse
- Grind and fettle weld spatter, protrusions and sharp edges to a minimum radius of 2mm
- All surfaces must be dry and clean

Steel



- All surface shall be abrasive blast cleaned to grade SA 2 ½ of standard ISO 8501-1 with a blast profile of 30-40µm. The coating must be applied before any flash rusting occurs or the surface shall be re-blast cleaned
- Alternatively abrade the surface thoroughly using grinding disks to achieve a similar profile

APPLICATION

Mixing – Two Components

- Stir the base component well with a flat-bottomed paddle or mechanical mixer until product is uniform. Continue stirring and add the entire contents of the activator container. Continue stirring until the mixture is homogeneous
- Paint must be agitated during application to keep the zinc suspended

Application – Equipment & Methods

 Airless Spray	Pump Ratio - 30 to 1 Min Nozzle Orifice - 19 to 23 Thou Tip Pressure - 100 Bar Min
 Conventional Spray	<ul style="list-style-type: none"> • Air Assisted Airless • Pressure Pot - Pressure Feed Gun • Gravity Feed Gun • Various Nozzle sets are available to suit the guns

Thinning

- Thin up to 10% with **Speccoats Etch Thinners**

Cleaner

- Cleaning is done with **Speccoats Etch Thinners**

APPLICATION ENVIROMENT

Level	Surface Temperature	Ambient Temperature	Relative Humidity
Minimum	-18°C*	-18°C	40%
Maximum	45°C	45°C	95%

*or 3° above the dew point

DRYING TIME

Touch dry	Over-coating interval		Dry to handle	Full Cure
	Minimum	Maximum		
15 minutes at 25°C for 75µm at 65% RH	24 hours at 25°C at 65% RH	No Limit	24 hours at 25°C at 65% RH	Determined by MEK solvent rub resistance

STORAGE AND HANDLING

Storage - Store at temperatures between 5°C and 40°C, away from direct sunlight, open flames or sparks

Flash Point - 13°C

HEALTH AND SAFETY

- Flammable
- Adequate ventilation should be provided during use
- Avoid contact with the skin by using gloves, barrier creams and face mask
- If the product comes into contact with the skin, wash immediately with lukewarm water and soap, if the eyes are affected flush with water of diluted boric acid solution and seek medical attention immediately
- Refer to Material Safety Data Sheet (MSDS)

DISCLAIMER

Whilst we endeavour to ensure that all advice we give about the product is correct, the information given in this data sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so entirely at his own risk. As conditions of use, method of application and suitability of the substrate prior to painting are beyond our control, no guarantee is implied by the recommendations contained herein. We therefore do not accept any liability whatsoever or howsoever arising from the performance of this product or for any loss or damage arising out of the use of this product. The information contained in this sheet is liable to modification from time to time in the light of experience and ongoing product development programmes. It is the user's responsibility to ensure that this sheet is current prior to using the product. **ISSUE DATE 12/10/2010**