

ZINCFIX® Original

Epoxy repair pack for galvanized steel

A two pack, solvent free, zinc- rich, amine cured epoxy coating supplied in a 100gm repair pack.

Intended Uses:

ZINCFIX® Original is an organic bound zinc rich coating containing greater than 80% zinc in the dry film. It is applied to clean steel and hot dip galvanized surfaces to form an adherent anti-corrosive coating in excess of 100 microns thick. ZINCFIX® Original combines the convenience of squish pack technology with the chemistry of modern solvent free epoxies.

ZINCFIX® Original will cure down to 0°C.

When suitably cleaned steel is dipped in molten zinc at 450°C, a coating comprising of a series of iron/zinc alloy layers, over-coated with relatively pure zinc is formed. The hot dip galvanized coating provides a barrier against corrosion but additionally, provides sacrificial protection when the coating is site cut, welded or mechanically damaged. In order to prevent this sacrificial protection property prematurely consuming the surrounding coating, repair of the damaged coating using ZINCFIX® Original is recommended.

Properties:

- The easy accurate mixing of small packs reduces wastage.
- Although the medium grey metallic colour of ZINCFIX® Original will stand out on the bright shiny surface of newly exposed zinc, it will blend into a very similar finish once the stable matt grey zinc carbonate film has formed.
- ZINCFIX® Original is resistant to white rust as the metal is bound by the epoxy binder. The product is resistant to 1000 hours humidity and 1000 hours salt spray resistance at a thickness of 400 microns with very little whitening.
- ZINCFIX® Original is an excellent anti-corrosive primer for steel and is ideal for rust prevention and repair of corroded steel. It can be applied as a single coat and can be over-coated with any kind of conventional painting system.
- ZINCFIX® Original is highly surface tolerant, requires minimal surface preparation for effective repairs.
- Offers outstanding adhesion to galvanized and mild steel.
- Fast curing technology.
- Early water resistance.
- Excellent flow and smoothing properties.

Technical Data:

Colour	Medium grey metallic
Finish	Smooth
Density (approx.)	3.98 Kg/ Litre (Comp A) 3.59 Kg/ Litre (Mixed)
Volume Solids	100%
Typical Film Thickness	100µm DFT
Theoretical Coverage	• 10 m ² / Litre at 100µm DFT, allow for loss factors • 0.3 m ² / 100gm pack at 100µm DFT, allow for loss factors
Method of Application	Brush or plastic applicator
Temperature Resistance	Dry continuous – 120°C
Number of Coats	1
Zinc % in Dry Film	82
Pot Life After Mixing	15 minutes @ 25°C

Industrial & Protective: Cold Galvanizing & Galvanized Steel Repair

Page 1 of 3

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:
28/09/2020

Drying Information:

	- 5°C	0°C	10°C	25°C	30°C	40°C
Touch Dry	-	-	-	2 hrs	-	-
Hard Dry	-	-	-	6 hrs	-	-
Full Cure	-	-	-	7 Days	-	-
Overcoating Data – See Limitations						
Substrate Temp.	- 5°C	0°C	10°C	25°C	30°C	40°C
Minimum	-	-	-	3 hrs	-	-
Maximum	-	-	-	48 hrs	-	-

Note: * Without abrasion.

Certifications:

ZINCFIX® Original has the following certifications:

- Approved by the Hot Dip Galvanizers Association of South Africa.
- Controlled condensation 100% humidity test -1000 hours.
- Salt Spray Testing – 1000 Hours.

Surface Preparation:

Abrasive Blast Cleaning and Mechanical Preparation - Steel

All surfaces to be coated must be dry, clean, and free from contamination. This product must only be applied to surfaces prepared by abrasive blast cleaning to SA 2½ in accordance with International Standard ISO 8501:2007 and SSPC-SP10. A blast profile of 40 - 50 microns is recommended or alternatively mechanically abrade the surface using grinding or flapper discs to achieve a similar profile.

Mechanical Preparation – Galvanized Steel Repair:

Surfaces must be abraded by a minimum radius of 25mm around the defect using 180# abrasive water paper (or finer) and water as a lubricant, the defect should be exposed to bare metal, but the size should be kept as small as possible. Immediately after abrasion wipe the surface clean and apply the premixed repair material within the abraded area. Do not overlap the “patch” onto un-abraded galvanizing.

Application:

Mixing:

Material is supplied in a squish pack whereby the **Part A (Zinc Base)** and **B (Curing Agent)** components are separated by a rubber strip. Always mix the squish pack in the quantities supplied. Once mixed the product should be used within the pot life specified.

Remove the rubber seal from the plastic channel between part A and part B.

Place the squish pack on a flat surface and using the plastic channel squeeze/iron the contents from one end of the packet to the other several times until even and smooth. Crumple and “squish” the components of the packet to mix thoroughly for 5 minutes. The contents will start to heat up (exothermic reaction) and must be used within the specified pot life.

Iron/squeeze all of the contents to one end of the packet and cut the corner of the opposite end of the bag and squeeze sufficient material out to coat the prepared area. The temperature of the mixed product should preferably be above 8°C, higher temperatures result in reduced sag resistance and faster cure.

Do not attempt to use the product after the specified pot life has been exceeded. The pot life will be shorter at higher temperatures and longer at lower temperatures. Wetting of the substrate is important for adhesion. When the product is too thick (at the end of its pot life) it is recommended to discard the material and mix a new packet

Industrial & Protective: Cold Galvanizing & Galvanized Steel Repair

Environment:

	Surface Temperature	Ambient Temperature	Relative Humidity
Minimum	7°C*	8°C	No lower limit
Maximum	60°C	45°C	90%

* Or 3°C above the dew point

Limitations:

- This product will chalk on prolonged exterior exposure.
- This product will not cure below 0°C.
- Overcoating information is given for guidance only and is subject to local climate and environmental conditions. Consult a Specialized Coating Systems representative for specific recommendations.
- Unmixed material (in closed containers) should be maintained in protected storage in accordance with information given in the STORAGE section of this data sheet.
- Technical and application data herein is for the purpose of establishing a general guideline of the coating application procedures.
- Test performance results were obtained in a controlled laboratory environment and Specialized Coating Systems makes no claim that the exhibited published test results, or any other tests, accurately represent results found in all field environments. As application, environmental and design factors can vary, due care should be exercised in the selection and verification of the performance and use of the coating.

Storage:

- Shelf Life: 12 months at 25°C – from date of manufacture. This can be extended to 24 months if stock is turned every 6 months to delay zinc settlement in the packets (Subject to inspection thereafter).
- Store in dry conditions out of direct sunlight away from sources of heat or ignition.
- Store at temperatures between 5°C and 35°C.

Precautions:

For complete safety and handling information please refer to the appropriate Safety Data Sheets prior to using this product.