



constructive solutions

# Nitoprime Zincrich

## Single component epoxy zinc primer

### Uses

Nitoprime Zincrich is the recommended anti-corrosion primer for exposed steel reinforcement for use with Fosroc concrete repair mortars. The product actively resists corrosion within the confines of the repair location and avoids the generation of incipient anodes in immediately adjacent locations.

It is fully compatible with all Renderoc mortars and liquid micro-concretes.

### Advantages

- 'Active' zinc-rich system combats corrosion by electro-chemical means.
- Formulated for use with Renderoc repair products.
- Single component product - easy to use with no restrictive pot-life.
- Time saving - touch dry after 15 to 45 minutes.
- Economical - single component ensures almost no waste.

### Standards compliance

Water Byelaws Scheme - approved product.

The product has also been approved by the British Board of Agreement, Certificate No. 91/2582 as part of the Renderoc system of concrete repair.

### Description

Nitoprime Zincrich is supplied as a single component grey coloured liquid based on metallic zinc and epoxy resins.



### Design criteria

One or two coats of Nitoprime Zincrich are generally required, dependent largely on the nature and profile of the substrate. Nitoprime Zincrich is recoatable generally between 30 minutes and one hour after the initial application. Application of concrete repair materials may also proceed at this time. At elevated temperatures, the recoatable and overlay times will be reduced. The minimum application temperature for Nitoprime Zincrich is 5°C. Consult the local Fosroc office for further information.

### Properties

Test	Typical results	
<b>Specific gravity:</b>	1.85±0.05	
<b>Recommended thickness per coat:</b>	40 microns (dry)	
<b>Application thickness per coat:</b>	135 microns (wet)	
<b>Drying times:</b>	<b>@20°C</b>	<b>@35°C</b>
<b>Touch dry</b>	45 min.	15 min.
<b>Fully dry/recoatable</b>	0.5 - 1	20 - 45
	1 hour	minutes

Note: at temperatures below 20°C, the drying times will be slower. Conversely, at temperatures above 35°C, the drying times will be faster.

### Specification clauses

#### Steel reinforcement primer

The steel reinforcement primer shall be Nitoprime Zincrich, a single -component zinc-rich liquid packed and supplied ready to use. An unbroken 40 microns thick coating shall be capable of providing 'active' galvanic protection and of avoiding the generation of incipient anodes in the immediately adjacent locations. It shall be of a suitable viscosity to enable the coating to penetrate imperfections and pits within the surface of corrosion-damaged steel bars.

The formulation of the primer shall be such that drying occurs to allow the application of the repair mortar to proceed after 20 to 45 minutes at 35°C or after 30 minutes to one hour at 20°C.

It shall be fully compatible with the Renderoc system of concrete repair.

### Technical support

Fosroc offers a comprehensive range of high performance, high quality concrete repair and construction products. In addition, Fosroc offers a technical support service to specifiers, end-users and contractors, as well as on-site technical assistance in locations all over the world.



# Nitoprime Zincrich

## Application instructions

### Preparation

Expose fully any corroded steel in the repair area and remove all loose scale and corrosion deposits. Steel should be cleaned to a bright condition paying particular attention to the back of exposed steel bars. Grit blasting is recommended for this process.

Where corrosion has occurred due to the presence of chlorides, the steel should be high-pressure washed with clean water immediately after grit blasting to remove corrosion products from pits and imperfections within its surface.

### Application

The application of Nitoprime Zincrich must take place as soon as possible to a dry steel surface after completion of the preparation work but always within 3 hours. Although a single component product, it should be stirred thoroughly before use in order to redisperse any settlement.

Apply one full and unbroken coat of Nitoprime Zincrich by suitable brush, making sure that the back of exposed steel reinforcing bars are properly coated. A small brush is generally more suitable for this purpose. Allow to dry fully before continuing. If any doubt exists about having achieved an unbroken coating, a second application should be made as soon as the first coat is fully dry (generally between 30 minutes and one hour).

The primed surfaces should not be left exposed to the elements for longer than necessary before over-coating or application of the repair material. Nitoprime Zincrich will, however, protect steel under clean interior exposure conditions for a period of several months. In non-aggressive exterior environments, a maximum interval of 14 days will be tolerated but in industrial and/or marine environments this interval should be reduced to the practical minimum.

The application of concrete repair materials should proceed as soon as the Nitoprime Zincrich is fully dry (generally 20 minutes to one hour - see under Properties).

### Low temperature working

The minimum application temperature is 5°C. The material should not be applied when the substrate and/or air temperature is 5°C and falling. At 5°C static temperature or at 5°C and rising, the application may proceed.

### Cleaning

Nitoprime Zincrich should be removed from tools, equipment and mixers with Fosroc Solvent 102 immediately after use.

## Limitations

Nitoprime Zincrich should not be applied when the temperature is below 5°C or is 5°C and falling. If any doubts arise concerning temperature or application conditions, consult the local Fosroc office.

## Estimating

### Supply

<b>Nitoprime Zincrich:</b>	1 litre cans
<b>Fosroc Solvent 102:</b>	5 litre and 20 litre cans

### Coverage

<b>Nitoprime Zincrich:</b>	7 m <sup>2</sup> /litre
----------------------------	-------------------------

**Note:** This coverage figure is theoretical - due to wastage factors and the variety and nature of possible steel substrates, practical coverage figures will be reduced.

## Storage

### Shelf life

Nitoprime Zincrich have a shelf life of 6 months if kept in a dry cool store in the original, unopened containers.

### Storage conditions

Store in dry conditions in the original containers. If stored at high temperatures and/or high humidity conditions the shelf life may be reduced.

## Precautions

### Health and safety

Nitoprime Zincrich and Fosroc Solvent 102 should not come in contact with the skin and eyes, or be swallowed. Ensure adequate ventilation and avoid inhalation of vapours. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye protection. If working in confined areas, suitable respiratory protective equipment must be used. The use of barrier creams provide additional skin protection. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water.

In case of skin contact with Nitoprime Zincrich, remove immediately with resin removing cream followed by washing with soap and water. **Do not use Solvent.** In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately - **Do not** induce vomiting.



# Nitoprime Zincrich

## Fire

Nitoprime Zincrich and Fosroc Solvent 102 are flammable. Keep away from sources of ignition. No smoking. In the event of fire, extinguish with CO<sub>2</sub> or foam. Do not use a water jet.

## Flash points

<b>Nitoprime Zincrich:</b>	16 <sup>o</sup> C
<b>Fosroc Solvent 102:</b>	33 <sup>o</sup> C

For further information, refer to the Product Material Safety Data Sheet.

## Additional information

Nitoprime Zincrich is the approved reinforcing steel primer for use with the Renderoc, Patchroc and Paveroc systems of concrete repair.

Fosroc manufactures a wide range of products specifically designed for the repair and refurbishment of damaged reinforced concrete. This includes hand-placed and spray grade repair mortars, fluid micro-concretes, chemical resistant epoxy mortars and a comprehensive package of protective coatings. In addition, a wide range of complementary products is available. This includes joint sealants, waterproofing membranes, grouting, anchoring and specialised flooring materials.

Fosroc have also produced several educational training videos which provide more details about the mechanisms which cause corrosion within reinforced concrete structures and the solutions which are available to arrest or retard these destructive mechanisms. Further information is available from the publications. 'Concrete Repair and Protection - The Systematic Approach', available in seven language formats.

For further information about products, training videos or publications, contact the local Fosroc office.



## PT. FOSROC Indonesia

Jl.Akasia II Blok A8 No.1  
Delta Silicon Industrial Park  
Lippo Cikarang  
Bekasi 17550  
Indonesia

[www.fosroc.com](http://www.fosroc.com)

### Important note

Fosroc products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Services, copies of which may be obtained on request. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it.

**telephone:**  
+62 21 897 2104-06

**fax:**  
+62 21 897 2107

**email:**  
[Indonesia@Fosroc.com](mailto:Indonesia@Fosroc.com)