



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 Fosroc Renderoc mortars and fluid micro-concretes.

Advantages

- 'Active' zinc-rich system combats corrosion by electro-chemical means
- Formulated for use with Fosroc 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.

Nitoprime Zincrich complies with the appropriate clauses of BS 4652:1971 - specification for metallic zinc-rich priming paint, Type 2.

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

Description

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

Technical support

Fosroc offers comprehensive technical support, including help at the design stage, application advice and on site problem solving. Specifiers and contractors are encouraged to contact our trained staff for answers to their questions. For further information please contact us at your nearest Fosroc office.

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.

Typical Properties

Test method	Typical result	
Specific gravity:	2.0	
Recommended thickness per coat:	40 microns (dry)	
Application thickness per coat:	135 microns (wet)	
Drying times –	@ 20°C	@ 35°C
Touch dry:	45 mins	15 mins
Fully dry/recoatable:	30 mins to 1 hour	20 to 45 mins

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.

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.

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.

Nitoprime Zincrich

Apply one full and unbroken coat of Nitoprime Zincrich with a 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 to one hour).

The primed surfaces should not be left exposed to the elements for longer than necessary before overcoating 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 - refer to Properties section).

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

Remove Nitoprime Zincrich 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

Nitoprime Zincrich:	1 litre and 4.5 litre cans
Fosroc Solvent 102:	5 litre cans

Note: In accordance with Commercial or Health & Safety requirements packaging detail may alter. Please contact your local Fosroc office for detail.



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Coverage

Nitoprime Zincrich:	7.4 m ² /litre
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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 and Fosroc Solvent 102 have a shelf life of 12 months if kept in a dry store in the original, unopened containers. Storage at high temperatures/humidity may reduce shelf life.

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 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.

Fire

Nitoprime Zincrich and Fosroc Solvent 102 are flammable. Keep away from sources of ignition. No smoking. In the event of fire, extinguish with CO₂ or foam. Do not use a water jet.

Flash points

Nitoprime Zincrich:	16°C
Fosroc Solvent 102:	33°C

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

Nitoprime is the trademark of Fosroc International Limited.

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 Service. Whilst Fosroc endeavours to ensure that any advice, recommendation, specification or 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 or information given by it.

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