

Fosroc® Nitoprime Zincrich Plus



constructive solutions

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Single component zinc primer for use with Renderoc repair system

Uses

Nitoprime Zincrich Plus is the recommended anti-corrosion primer for exposed steel reinforcement for use with Fosroc concrete repair mortars.

It is fully compatible with all Renderoc mortars and fluid 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
- Economical — single component ensures almost no waste

Description

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

Specification clauses

Steel reinforcement primer

The steel reinforcement primer shall be Nitoprime Zincrich Plus, 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. It shall be 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 2 hours at 20°C.

It shall be fully compatible with the Renderoc, Patchroc, Paveroc and Nitomortar systems.

Standards compliance

Nitoprime Zincrich Plus complies with LU Standard 1-085 'Fire Safety Performance of Materials'.



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Nitoprime Zincrich Plus

EN1504-7: Reinforcement corrosion protection
method 11.1

Corrosion protection	Pass
Dangerous substances	Conforms to 5.3

Properties

Test method	Typical result
Specific gravity:	2.5
Recommended thickness per coat:	40 microns (dry)
Application thickness per coat:	100 microns (wet)
Drying times —	@ 20°C
Touch dry:	2 hours
Fully dry/recoat:	4 hours

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

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 minimum of ST3 standard, paying particular attention to the back of exposed steel bars. This should be achieved by suitable mechanical means, e.g. grit-blasting, powered wire-brushing, high pressure jetting or alternative equivalent.

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 Plus 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.

Fosroc® Nitoprime Zincrich Plus

Apply one full and unbroken coat of Nitoprime Zincrich Plus 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 after 2 hours).

The application of concrete repair materials may proceed as soon as the Nitoprime Zincrich Plus is touch dry (generally 2 hours — see under Properties).

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 Plus 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. If the 14 days in an external environment has been exceeded, inspect the coating for signs of damage, remove any dust by vacuuming or utilizing oil free compressed air. If damage is detected, remove the affected areas and re-apply Nitoprime Zincrich Plus, lapping onto adjacent undamaged areas by a minimum of 20mm.

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, or is less than 3°C above the dew point. At 5°C static temperature or at 5°C and rising, the application may proceed.

Cleaning

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

Estimating

Supply

Nitoprime Zincrich Plus:	1.9 litre and 800ml cans
Fosroc Solvent 102 :	5 and 25 litre tins

Coverage

Nitoprime Zincrich Plus:	8 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.

Limitations

Nitoprime Zincrich Plus 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.

Storage

Store in dry conditions in the original containers. Nitoprime Zincrich Plus and Fosroc Solvent 102 have a shelf life of 12 months if kept in a dry store in the original, unopened containers.

If stored at high temperatures and/or high humidity conditions the shelf life may be reduced.

Precautions

Health and safety

For further information refer to the appropriate Product Safety Data Sheet

Fire

Nitoprime Zincrich Plus 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 Plus:	41°C
Fosroc Solvent 102:	33°C

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

Additional information

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

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