

PROTEKTA PROTEX

USES

- Permanently seals cracks up to 2.00mm
- Reseals future hairline cracking
- Reduction of chloride diffusion coefficient by 89%
- Increases surface hardness from 6 to 8 on Moh's scale
- Allow 60% moisture vapour permeability
- Suitable for tanking application (positive hydrostatic pressure)
- Non Toxic-Certified suitability for potable water.

DESCRIPTION

Protekta Protex is a two-component product.

1. Protekta Protex
2. Protekta Protex Slurry

First Protekta Protex has to be applied and once it is dried coat of Protekta Protex Slurry should be followed.

Protekta Protex is based on the concept of protecting the concrete by **crystallization and it works in the following fashion.**

Protekta Protex :

This biochemically modified solution is sprayed on fresh or cured concrete and through a 3 day watering process the product penetrates and reacts with the concrete forming **crystals as subsurface barriers**. These crystals waterproof pores, capillaries and cracks against the ingress of water. This crystallization mechanism provides reduction of porosity and durability benefits to the concrete.

To study the behaviour of effectiveness of Protekta Protex, extensive studies were conducted at Building Protection Systems, Victoria University of Technology, Melbourne using

- Fourier Transform Infrared spectrometry (FTIR)
- Head space gas chromatography (HSGC)
- Gel permeation, chromatography and ultra violet. Under the guidance of Prof. Douglas A. Kagi. This was followed by a very exhaustive study on the effect of emulsifiers and surface-active agents on this technique.

Protekta Protex Slurry:

The second component Protekta Protex slurry is supplied as ready to use product. . This coating of slurry has a very special chemical, which migrates through out the pores and capillaries because of its strong affinity with water. Protekta Protex not only protects the concrete and reinforces the steel but allow normal breathing of the concrete. It is a non-toxic, water based product and can be applied to moist or fresh concrete. Infact the moisture helps crystallization and crystalline formation.

The superiority of this Protekta Protex is that it has been biologically modified and its effectiveness and penetration has increased many folds. Moreover when it comes in contact with concrete or cement plaster, it is chemically pulled felicitating the penetration.

It is just not a coating, but seals the cracks by virtue and process of osmosis and formation of crystals. By using both these components the crystalline formation becomes an integral part of the concrete because it goes into capillaries and pores and does not remain just as a coating.

APPLICATION

- Must be applied to a clean, dust-free concrete surface.
- Any materials that retard penetration should be removed
- Where segregation or voids are apparent, chip out, spray with Protekta Protex, then make good with cementitious materials.
- Old or carbonated concrete requires Protekta Guard treatment to reinstate free Calcium
- Do not apply where ambient temperatures are above + 40°C

Application Rates:

Normal	: 1 litre of 3 sq. mtr.
Smooth, dense surfaces	: upto 1 litre to 5 sq. mtr
Rough, Porous Surfaces	: down to 1 litre to 25 sq. mtr
For cracked Areas	: an additional 1 litre per 5 Lineal mtr is recommended.

Application Method:

- Locate all cracks and spray with solution ensuring they are flooded with product.
- Apply the solution to the remaining area at a rate of between 3-4 sq.m per litre.

TECHNICAL DATA

Appearance : White/grey
pH : 7-9

Contains anionic acrylic polymers
Crystallization products

COVERAGE: 12-15 sq.ft (1.5 -2 mm thick)

SHELF LIFE: 6 months in a closed uncontaminated container and should be used before the use-by-date printed on the container. However if the product is passed its used-by-date it is not necessarily unusable. A quality control should be performed on the properties relevant to the application or otherwise contact the manufacturer for further advice

STORAGE: To be stored in closed containers in a cool place and prevent from extremes of heat

HEALTH & SAFETY: Non-Hazardous, Non-toxic, Non-flammable

Protekta products are non-hazardous when properly handled, stored and applied. When handling suitable protective clothing should be worn. The materials should not be ingested, inhaled or make skin contact. MSDS can be provided.

Warranty

The information given in this data sheet is based on many years of experience and is correct to the best of our knowledge and should be used only as a guide. Tech Dry (India) Pvt Ltd reserves the right to alter certain product parameters within the spectrum of properties in order to keep abreast of technical advances. The information in this document is based on the present state of our knowledge and is applicable to the product. It does not represent a guarantee of the properties of the product. Tech Dry (India) Pvt Ltd is responsible for the quality of the product at the time of despatch but is not responsible for its quality after subsequent storage, handling and application. Neither Tech Dry (India) Pvt Ltd nor its associated companies shall be held liable for any damage resulting from the handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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