

NIPPON Concrete Permeating Solution

(Previously known as Nippon CP)

Description

NIPPON Concrete Permeating Solution is a water-borne, green product that works by permeating concrete. It is not a silicate, sodium silicate or lithium-based product, but a hydrogel. NIPPON Concrete Permeating Solution is a 1K material and is amorphous in the absence of water and possesses the ability to repeatedly re-hydrate while performing three main functions:

- Permeates concrete substrates from 5.5 to 6 inches (up to ~150mm) below the surface.
- Removes chlorides and salts from concrete substrate surfaces as well as below.
- Creates an aqueous film that protects against water while allowing the concrete to continue to breath.

Basic Usage

It is an ideal tool for stopping spalling and improving concrete's durability against the environment. NIPPON Concrete Permeating Solution is not a structural product. It is imperative to confirm with an engineer that the structure is sound. Like any anti-corrosive product it stops further corrosion, existing damage will not be restored.

NIPPON Concrete Permeating Solution will not change the surface of concrete substrates. While application is taking place, a light sheen may appear, and if salt is present, it may rise to the surface. The salt must be washed off.

Besides salt, NIPPON Concrete Permeating Solution will remove chlorides and permeate deeply below the surface of concrete and can access up to 5.5 to 6 inches (up to ~150mm) into a standard concrete medium.

Application Guide

Mixing Ratio (by Volume)	: Not applicable
Recommended DFT (µm)	: Spray a few times until saturation
Application Method	: By Airless Spray or Brush
Application Direction	: North-South direction followed by East-West direction
Airless Spray Application	: Tip Size 0.011" to 0.019"
	: Pressure at Nozzle \geq 2,000 psi
Number of coats	: 2 to 3 coats
Touch Dry	: Min 12 hours
	: Min 2 hours (for small area)
Theoretical Coverage	: 0.24 Litre / m ²

Properties

Physical	: Liquid
Color	: Yellowish / Greenish
Odor	: None
Specific gravity	: 1.09 to 1.10
Flash point	: None
pH	: 12±
Toxicity	: None
Boiling point	: 230° F / 110° C
Freeze temperature	: 32° F / 0° C
Hazardous vapors	: None
Weight per gallon	: 9.15 lbs / 4.15 kg
Environmentally	: Neutral
Freeze harm	: None (allow to thaw completely)
Surface bond	: Excellent
Flammability	: None
VOC (ISO 11890-2)	: <2 g/L
Chloride Reduction	: ≥ 50% (AASHTO T259-02 (2012))
TVOC Emission	: 0.01 mg/m ³ (SGBC min Criteria ≤0.05)
Formaldehyde Emission	: 0.008 mg/m ³ (SGBC min Criteria ≤0.10)

Surface Preparation

All surfaces should be clean and free from laitance, curing compounds, release agents, efflorescence, grease, oil, dirt, organic growth, old coatings and loose or disintegrating concrete. Since Nippon Concrete Permeating Solution is a water-borne product, it can be applied to dry, wet, or damp concrete surfaces. However, any pooled water in low spots must be removed beforehand

Shelf-Life

Shelf life is expected to be 5 years at 25° C if container is new/sealed and stored in a cool, dry environment. Shelf life from date of manufacture, when stored in original, unopened containers. Subject to re-inspection thereafter. Higher temperature during storage may reduce the shelf life and may lead to gelling in the tin. Frequent temperature cycles may also shorten the shelf life. Store in tightly closed container in a dry, cool and well-ventilated space, keep away from sources of heat and ignition.

Packaging

Unit: : 18.95 litre

Disclaimer

Refer to our Material Safety Data Sheet (MSDS) regarding regulatory compliance, safety, hazards, spill procedures and disposal of this product.

While the descriptions, designs, data and information contained herein are presented in good faith and believed to be accurate, it is provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use.

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