

TECHNICAL DATA SHEET

NIPPOMIX WP200 (formerly known as Nippon Admix WP200)

Updated Nov'22

DESCRIPTION

NippoMIX WP200 is a capillary crystalline cementitious waterproofing material and it is designed for waterproofing, protection and repair ofconcrete. It consists of high-quality Portland cement, finely graded natural aggregate and active proprietary chemical mixtures.

NippoMIX WP200 is applied as dry shake onto fresh pour concrete or as cementitious slurry to the pre-saturated harden concrete surface at aboveground or below ground structure. The active chemicals penetrate deep and diffuse into the substrate, reacts with water and cement hydration by- products to form a non-soluble and hard crystals throughout the pores and capillary voids, and thus it is able to infill any micro-cracks inside the concrete. **NippoMIX WP200** is permanently sealing the concrete and preventing the penetration of water from any direction under hydrostatic pressure.

<u>USES</u>

NippoMIX WP200 is suitable for waterproofing applications to below ground and above ground structure of new and existing buildings such as:

- Below ground slab and suspended slab
- Foundation and retaining walls
- Lift Pit
- Pile head and ground beam
- Tunnels and Subway Systems
- Conduits and Culverts
- Marine and other water retaining structures
- Reservoirs
- Swimming Pool and Water Feature
- Water treatment plant and Sewage treatment plant
- Precast structures
- Roof Decks
- Parking Structures
- Bridges

ADVANTAGES

- Able to withstand high hydrostatic pressure > 7 bars
- Can seal hairline cracks and static cracks up to 0.4mm
- Cost saving on labour with dry shake method application
- Deep penetration into concrete structures and becomes an integral part of the substrate
- Economical and simple to apply
- Effective when applied both internally or externally
- Non-toxic, zero VOC, complies with SS375:2001 portable water
- Protection of concrete against aggressive chemicals including chloride attack to reinforcement steel from corrosion
- Breathable
- Does not require a dry surface
- Cannot puncture, tear or come apart at the seams
- No costly surface priming or levelling prior to application
- Does not require sealing, lapping and finishing of seams at corners, edges or between membranes
- Does not require protection during backfilling or during placement of steel, wire mesh or other materials
- Not subject to deterioration.
- Permanent.



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Product Type	Product	Pack Size	Finishing	Substrate	
Integral Waterproofing (Penetrating Diffusive Capillary Crystalline)	NippoMIX WP200	20kg/bag	Grey powder	Concrete, Masonry	
Application Data					
Drying Time (25-30°C), hour Recoating Time, hour Theoretical Coverage*, L/m ²	: 1 : 1 afte <i>(Alwa coat,</i> ² per coat : 0.1-0 meth recor cover	 : 1 : 1 after the first coat is fully penetrating and the coated surface is dry (Always apply in two-three neat and flood coats, in right angles to each coat, allow the first coat to dry out fully.) : 0.1-0.3 (actual coverage is dependent on substrate condition, application method, application condition and finishing appearance). It is recommended to go for actual application to estimate the practical coverage for project. 			
Typical Technical Data					
Form Color Pot Life (coating application Toxicity (SS 375) Water Penetration, mm (DIN Water Permeability Shelf Life	: Powd : Grey), minutes : 15 : Comp N 1048 Part 5) : < 20 : < 5 x 12 mo	er Iliance 10 ⁻¹² onths from original conta	iner at proper storage	place condition	

Application Method

By Coatings Application

Surface Preparation

- 1. Surface must be clean and free of voids, loose materials, oil grease, curing compounds, sealers and anyforeign matters.
- 2. All crack lines, holes, honeycomb or unsound surface must be patched and repaired with suitablematerials such as **NippoJECT** and **Nippon Paint Non-Shrink Grout** series.
- 3. Surface must be pre-wet with water (damped) prior to application of **NippoMIX WP200.**

<u>Mixing</u>

- 1. Add NippoMIX WP200 into 8 Litres of clean water slowly under a constant agitation tillhomogenous mixture.
- 2. All mixture must be used within 15 minutes.
- 3. If setting of the mixture has occurred in the container, do not add water to regain workability, instead discard all materials and use fresh materials.

Application

- 1. Apply the mixture with spraying equipment, brush or roller onto the pre-wet surface
- 2. The recommendation application rate is 0.75kg/m²/coat.
- 3. Apply the second coat at 90 degree the opposite direction to the first coat after the first coat is fullydried.

Post Treatment

After **NippoMIX WP200** system has set, it is recommended to apply moisture by sprinkle water to the set surface 3 times daily for 3 consecutive days, to ensure full curing of the system.

By Dry Shake Application

Surface Preparation

- 1. Surface must be clean and free of voids, loose materials, oil grease, curing compounds, sealers and any foreign matters.
- 2. If a rapid loss of water in the fresh concrete is expected due to weather or other factors, suitable protection to the surface to prevent "drying-out" is necessary before applying **NippoMIX WP200**.



Application

- 1. Spread **NippoMIX WP200** dry power uniformly over the area at 1.5kg/m2 with a spreading equipment or manual means.
- 2. Trowel or power-float NippoMIX WP200 into the concrete.
- 3. For special treatment to areas such as construction joints, please consult Nippon Paint Techno-Commercial representative.

Post Treatment

After **NippoMIX WP200** system has set, it is recommended to apply moisture by sprinkle water to the set surface 3 times daily for 3 consecutive days, to ensure full curing of the system.

Recommended Waterproofing System				
Concrete Substrate (by Coating)				
Waterproofing First Coat	: NippoMIX WP200	0.75 kg/m ²		
Waterproofing Second Coat	: NippoMIX WP200	0.75 kg/m ²		
<u>Concrete Substrate (by Dry Shake)</u> Waterproofing	: NippoMIX WP200	1.50 kg/m ²		

Environmental Conditions During Application

Apply temperature: 15-35°C. Do not apply when the surface to be coated is less than 3[®]C above the dew point.

Storage and Transportation

This product should be stored at shaded or cool and adequate ventilation warehouse. The storage temperature should be 15-25°C. This product should be away exposure from rain, sunlight, source of flame and heat. When transporting, care must be taken. It is always kept container in a secure upright position. Failure to comply with the recommended storage may result in considerable premature deterioration of the product.

Cleaning

Clean up equipment or tools with water immediately after use.

Safety Precautions

- Keep container tightly closed and keep out of reach children or away from food and drink.
- Ensure good ventilation during application and drying.
- When applying, it is advisable to wear eye protection.
- In case of contact with eye, rinse with plenty of water immediately and seek medical advice.
- Remove splashes from skin by using soap or water.
- Material must always be stored in a cool place.
- Dispose off any waste in accordance with the appropriate Environment Quality Regulations.

Note

*Theoretical Coverage is based on a mathematical formula and does not consider Loss Factor.

$$\frac{Volume \ Solid \ \% \ x \ 10}{Dry \ Film \ Thickness \ (\mu)} = m^2 / lit/coat$$

This theoretical coverage rate has been calculated from the volume solids of the material and is related to the amount of coating applied onto a perfectly smooth surface without wastage. Variables like porosity of substrate, application method, dilution ratio, dry film thickness, opacity and so on will affect theloss factor and can vary from 30% - 50% or even more. For a practical coverage rate, due allowance should be made for atmospheric conditions, surface roughness, geometry of the article being coated, the skill of applicator, method of application etc. when estimating quantities required for a particular job.

The above information is given to the best of our knowledge based on laboratory tests and practical experience. However, since we cannot anticipate or control the many conditions under which our products may be used, we can only guarantee the quality of the product itself. we reserve the right to alter the given without prior notice.