

NIPPOSEAL PUREA-HA (formerly known as Nippon LM Polyurea-HA)

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DESCRIPTION

NippoSEAL PUREA-HA is a two component, solvent free 100% liquid applied pure polyurea seamless, root resistant, elastomeric waterproofing membrane based on delayed polyurea chemistry. It is specially designed to re-waterproofing substrate with sorted tiles.

USES

NippoSEAL PUREA-HA is suitable for outdoor waterproofing applications such as:

- RC roof slabs
- Car park decks
- Scupper/gutter
- Planter box
- Podium deck
- Balcony

ADVANTAGES

- Highly elasticity and seamless
- Excellent Crack bridging
- Excellent waterproofing quality
- Excellent adhesion for over-layment
- Excellent wetting of substrate
- Easy application by brush, roller, and trowel

Product Type	Product	Pack Size	Finishing	Substrate
Liquid Applied Waterproofing Membrane	NippoSEAL PUREA-HA	Part A: 4.8kg or 1.2kg/pail Part B: 15.2kg or 3.8kg/pail	Grey color with Smooth Finish	Concrete / Tile / Metal

Application Data

Mixing Ratio (Weight Ratio)	: Part A : Part B = 1.2 : 3.8
Pot Life at 25°C, minutes	: 25
Drying Time at 25-30°C, hours	: ≥ 8 (Touch Dry) ≥ 8 hours; ≤ 24 (Full Dry) (Drying time is measured at condition 25°C, 60% humidity for reference. Actual Drying time depends on actual site and substrate temperature, humidity, film thickness and undercoat systems)
Interval Recoat Time, hours	: 12
Theoretical Coverage*	
Trowel Application, kg/m ²	: 1.00 (1mm DFT)
Roller Application, kg/m ²	: 0.50 (0.5mm DFT) (Actual coverage depends on substrate condition, application method, application condition, etc.)

Typical Technical Data

Form	: Liquid
Color	: Buff
Solids, %	: 100
Tensile Strength, MPa	: 6.9
Elongation at Break, %	: 727
Tear Strength, N	: 99.8
Water Penetration	: No Penetration
Adhesion Strength, MPa	: ≥ 2.5

Water Absorption	: Pass
Soil Resistance	: Pass
Oil Resistance	: Pass
Water Resistance & Immersion	: Pass
Compliances	: ASTM D412, DIN 1048, PD CEN-TS 14416
Shelf Life	: Up to 12 months in original tight sealed container

Application Method

Substrate Preparation

Concrete Substrate

The substrate must be thoroughly clean and dry, free from dust, algae, mildew, fungal, grease and oil. All the contaminants, previous waterproofing and impurity must be removed till bare substrate. Any cracks, honey combs, water leakage area should be repaired by **Nippon Paint Repair System** (for more detail, please refer to Nippon Paint Technical Department) before the waterproofing work proceed. The substrate must be sound and dry with no rising damp. The concrete surface should be flat and free from holes and undulations. Any holes and undulations should resurface with **Nippon Paint Scratch Coat System**. The surface should be clean smooth and cast to fall to allow water run-off.

This product is designed for trowel, roller and brush application.

Metal Substrate

For maximum performance, this product should be applied to a surface that has been blast cleaned to St3.0 or Sa2.5 (ISO 8501-1:2007) and suitably primed. The surface to be overcoated must be dry and free from surface contaminants. All wax, oil and grease should be removed by solvent cleaning in accordance with the guidelines complying to SSPC- SP 1. Soluble salts, dirt and dust must be removed prior to applying the waterproofing. Dry brushing should be sufficient. A freshwater wash must follow to remove all soluble salts. Always ensure maximum overcoating time for the primer has not been exceeded prior to application.

Mixing

NippoSEAL PUREA-HA is supplied in proportionate quantities in 2-component containers. Stir the content of the part B component, gradually add the total contents of the part A component while stirring, continue stirring the mixture until a homogeneous mix is obtained. The mixing ratio should be strictly controlled and avoid partially mixing. The mixture must be finish applied in 30 min after mixing.

Recommended Waterproofing System

Concrete Substrate (Conceal)

Primer	: Nippon Paint PRIMECRETE WB	0.20 kg/m ²
Waterproofing	: NippoSEAL PUREA-HA	1.0 – 1.5mm

Car Park Exposed Deck

Primer	: Nippon Paint PRIMECRETE WB	0.20 kg/m ²
Waterproofing	: NippoSEAL PUREA-HA	1.0 – 2.0mm
Top Coat	: NippoSEAL SPARTIC-HA	0.3 – 0.5mm

Tile Substrate

Primer	: Nippon Paint Tile Primer	0.20 kg/m ²
Waterproofing	: NippoSEAL PUREA-HA	1 mm
Top Coat	: NippoSEAL SPARTIC-HA	0.3 – 0.5mm

Metal Substrate

Primer	: Nippon Paint PRIMET	0.20 kg/m ²
Waterproofing	: NippoSEAL PUREA-HA	1 mm
Top Coat	: NippoSEAL SPARTIC-HA	0.3 – 0.5mm

Environmental Conditions During Application

- Do not apply when the relative humidity exceeds 85%.
- Surface to be coated less than 3% above the dew point.
- Do not apply temperature below 5°C and temperatures above 40°C.

Storage and Transportation

This product should be stored at shaded or cool and adequate ventilation warehouse. The storage temperature should be 15-40°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.

Cleaning

Clean up equipment or tools with thinner 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 paint, it is advisable to wear eye protection.
- In case of contact with eye, rinse with plenty of water immediately and seek medical advice.
- Paint must always be stored in a cool place.
- When transporting paint, care must be taken. Always keep container in a secure upright position.
- Dispose off any paint waste in accordance with the appropriate Environment Quality Regulations.

Note

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

$$\left[\frac{\text{Volume Solid \%} \times 10}{\text{Dry Film Thickness } (\mu)} \right] = \text{m}^2/\text{lit}/\text{coat}$$

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 the loss 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.