

NIPPOSEAL SPARTIC CLEAR
Updated Nov'25
DESCRIPTION

NippoSEAL SPARTIC CLEAR is a two component, user friendly, high solid liquid applied pure polyaspartic seamless waterproofing membrane. This seamless waterproofing membrane provides an elastic and tough surface, designed for application which impact resistant, abrasion resistant and excellent weathering resistant is required.

USES

NippoSEAL SPARTIC CLEAR is suitable for various types of tiles and concrete floor of wet area, including bathroom, toilets, kitchen, balcony and roof top.

ADVANTAGES

- Excellent weathering resistant
- Excellent tensile and elongation properties.
- Excellent waterproof and decorative performance.
- Good bond strength with various type of tiles and concrete
- Good abrasion resistance
- Non yellowing, excellent gloss retention.
- Easy application by brush, roller, trowel.
- Seamless.

Product Type	Usage	Finishing	Substrate	Pack Size
Liquid Applied Waterproofing Membrane	Interior/Exterior	Clear, High Gloss Finish	Concrete, Tiles	1 set inclusive of: Part A = 1KG Part B = 1KG Surface Treatment Agent= 0.030KG Anti-skid Additive =0.20KG

**Surface Treatment Agent to be used for application on tiles only*

Typical Technical Data

Solid Content, %	: ≥ 80
Flash Point, °C	: $30 \pm 2^{\circ}\text{C}$
Viscosity at 25°C, cps	: 600-1000
Density, kg/L	: 1.060
Mixing Ratio (by weight)	: 1: 1 (Part A : Part B)
Pot-life @ 25°C, hour	: 20-30 min
Drying time @ 25°C, hour	: Tack free time : ≤ 40 min Hard Dry : ≤ 5 hours
Recoat Time	: After 8-12 hours (<i>Depends on surrounding temperature and humidity</i>)
Step On Time	: After 8 hours (<i>Depends on surrounding temperature and humidity</i>)
Open for water contact	: After 48 hours but wipe any water puddle formed immediately after use (<i>Depends on surrounding temperature and humidity</i>)
Full cure time	: After 5 days waterproofing membrane is fully cured and can be used normally for wet areas (<i>Depends on surrounding temperature and humidity</i>)
Shelf life	: 1 year
Recommended Thickness, μm	: 150 – 200 μm DFT per coat
Theoretical Coverage	: 0.20-0.30 $\text{kg}/\text{m}^2/\text{coat}$
Number of coats	: 2 coats

This theoretical coverage rate has been calculated from the volume solids of the material and is related to the amount of of coating applied onto a perfectly smooth surface without wastage. For a practical coverage rate, due allowance should be made for atmosphere conditions, surface A roughness, geometry of the article being coated, the skill of applicator etc, when estimating quantities required for a particular job.

Performance

Tensile Strength, MPa	: > 10
Elongation @ Break, %	: ≥ 120
Tear Strength, kN/m	: ≥ 70
Hardness (Shore A)	: ≥ 70
Abrasion Resistant (750g/500r), mg	: ≤ 15
Crack Bridging [mm] (thickness of the sample 2-3mm)	: ≥ 23

Application Method
SUBSTRATE PREPARATION
TILE SUBSTRATE

The surface to be coated must be dry and free from surface contaminants. All dust, wax, oil and grease should be removed thoroughly. Any cracks, buckling and water leakage area should be repaired before **the application work** is conducted. The substrate must be in good condition and dry with no rising damp from the joint of the tiles. The surface should be clean, smooth and allow water run-off.

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 impurities must be removed till bare substrate. Any cracks, honeycombs, or water leakage area should be repaired before proceeding with the painting job. The substrate must be sound and dry with no rising dampness. The concrete surface should be flat and free from holes and undulations.

MIXING:

NippoSEAL SPARTIC CLEAR is supplied in proportionate quantities in 2-component containers. The entire contents of **Part A** are mixed and poured into a clean mixing barrel. Pour all **Anti-Skid Powder** into mixing barrel and stir for 1 minute with an electrical hand-held stirrer until homogeneous. Then pour **Part B** into the mixing barrel and mix for another for 1 minute to achieve a homogenous mixture. Take note the pot-life of this mixture is 20-30 minutes.

APPLICATION
TILES SURFACE

For the best performance, use **Surface Treatment Agent** on tile surfaces. Dip the **Surface Treatment Agent** with a clean cloth, and wipe the surface of tiles evenly. Ensure that all the tile surfaces are well wiped without missing out any small areas. Apply **NippoSEAL SPARTIC CLEAR** at a rate of 0.20 – 0.30 kg/m²/coat, and spread evenly with mohair roller or brush. Ensure all the joints, gap and edges of tiles are well sealed with **NippoSEAL SPARTIC CLEAR**, according to the recommended thickness. Leave it dry for 12 hours before the subsequent coat.

CONCRETE SURFACE

For concrete substrate, prime the surface with 1 coat of **NippoSEAL SPARTIC CLEAR** with 20% dilution using **Nippon Paint OP-1 Thinner**. Allow the primer to dry for about 12 hours prior to subsequent finishing coat. Apply **NippoSEAL SPARTIC CLEAR** at a rate of 0.20-0.30 kg/m²/coat, and spread evenly with mohair roller or brush. Ensure all surface of the concrete is well sealed with **NippoSEAL SPARTIC CLEAR**, according to the recommended thickness. Leave it dry for 12 hours before subsequent coat.

CLEANING:

Clean up equipment with Nippon Paint OP-1 Thinner immediately after use.

Recommended Waterproofing System
Tile Substrate

Surface Preparation	: Surface Treatment Agent	
Finishing Coat	: NippoSEAL SPARTIC CLEAR (2 coats)	0.20-0.30 kg/m ² /coat

Concrete Substrate

Primer	: NippoSEAL SPARTIC CLEAR with 20% dilution of OP-1 Thinner	0.20 kg/m ² /coat
Finishing Coat	: NippoSEAL SPARTIC CLEAR (2 coats)	0.20-0.30 kg/m ² /coat

POST APPLICATION AND MAINTENANCE

- It is advisable to use soft bristle brush for routine cleaning. Do not use scouring pad cleaner, or cleaners that contain abrasives to avoid scratch marks.
- It is recommended to walk on the painted surface 8 hours after applying **NippoSEAL SPARTIC CLEAR**.
- Ensure there is no water contact for 48 hours after applying the waterproof membrane.
- On wet areas, it is recommended to start using the room 2 days after application, but any water puddle should be wiped immediately after use.
- The newly waterproofed area can be used normally 5 days after applying **NippoSEAL SPARTIC CLEAR**.

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.

Safety Precaution

- 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.

Certificates
Tests

1. BS EN 1062-7-2004 on Crack Bridging Test (Continuous Opening of Crack by Tensile Test) by TESTECH Sdn. Bhd.
2. ASTM D 412-16 (2021) on Tensile & Elongation by SIRIM
3. ASTM D7234-21 on Pull-Off Adhesion Strength of Coatings, tested in house
4. ASTM D4060-25 – Standard Test Method for Abrasion Resistance of Organic Coatings by SIRIM QAS
5. ASTM D2794-93(2024) – Standard Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact) by SIRIM QAS

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.