

**NIPPOSEAL INTERBIT** (formerly known as *Nippon BT Intermediate*)

*Updated Mar'23*
**DESCRIPTION**

**NippoSEAL INTERBIT** is a cold applied, single component, jointless, styrene butadiene rubber modified bitumen for use as a liquid apply damp proof membrane in sandwich construction and as a general-purpose waterproofing and vapour-proofing for walls, floors and others. It is also as an effective adhesive and bonding agent for insulation boards, expanded polystyrene boards and etc. **NippoSEAL INTERBIT** can be used to fill cracks in concrete and asphalt up to 5 mm wide.

**USES**

**NippoSEAL INTERBIT** is suitable for waterproofing applications such as:

- Structural walls, foundation walls, retaining walls
- Foundation slabs, tie beams, footings, copings, ramps, lift pits and etc
- Insulation board adhesive
- Lining of tanks
- For surface preparation before plastering
- Earth covered roof
- As a damp proof membrane for sandwich construction

**ADVANTAGES**

- Zero VOC, non-flammable, safe to use, non-toxic, and odourless
- Single component and ready-to use
- High temperature stability
- Breathable
- High build and thixotropic (prevent sagging on vertical wall)
- Excellent resistant to chlorides, sulphates, mild acids, alkalis, oil, salts, bacteria and soil chemicals
- Excellent adhesion to green and damp concrete
- Seamless and anti-water migration
- Easy application by brush, roller, trowel and airless spray

Product Type	Product	Pack Size	Finishing	Substrate
Liquid Applied Waterproofing Membrane	<b>NippoSEAL INTERBIT</b>	20kg / pail	Dark Brown to Black	Concrete

**Application Data**

Drying Time (25-30°C)	: Touch Dry 4-6 hours. : Hard Dry ≤ 24 hours (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 substrate).
Curing	: Allow curing approx. 2 – 5 days depending on local climate conditions
Interval Recoat Time	: Minimum 4-15 hours, depending on coat thickness, temperature, wind conditions, humidity, and substrate.
Theoretical Coverage* Trowel Application	: 2.00 – 2.30 kg per m <sup>2</sup> for 1.0 mm DFT
Roller Application	: Always apply in three coats at 0.6kg/m <sup>3</sup> /coat, in right angles to each coat. Allow the first coat to dry out fully. For critical area waterproofing, minimum 1.5mm dry film thickness is advised, and usually with one layer of <b>NIPPON PAINT LM MAT</b> reinforcement. (Theoretical rate only applies to a smooth non-porous substrate. Actual coverage depends on substrate condition, application method, application condition, etc.)

**Typical Technical Data**

Form	: Smooth and thixotropic dark brown liquid paste
Color	: Black when dry
Solids, %	: 47-55
Density, kg/L	: 1.00 ± 0.05
Drying Time, hours	: 4-6 (under normal condition)
Water Resistance	: No re-emulsification
Adhesion Strength, MPa	: ≥ 1.0
Water Vapor Permeability, g/m <sup>2</sup> /24hours	: 1.1
Soil Resistance	: Pass
Cold Flexibility at 0°C	: No cracking or flaking
Heat Resistance at 100°C	: no flowing, dripping, blistering or sagging
Shelf Life	: Up to 12 months in original tight sealed container stored at dry cool place
Reaction to fire	: Class E (non-flammable)

**Application Method**
**Substrate Preparation**
**Concrete Substrate**

The substrate must be thoroughly clean and dry, free from dust, 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. The concrete surface should be flat and free from holes and undulations. Any holes and undulations should be resurfacing with Nippon Paint Scratch Coat System. The surface should have a sand paper profile roughness and should have a slope of at least 1% to allow water run-off.

**Mixing**

Mix for at least 2-3 minutes to achieve a homogeneous mixture, with a mechanical drill fitted with a suitable paddle prior to application. Application should commence immediately after mixing.

**Primer**

Primer is not normally required on good quality concrete substrate. To porous and absorbance concrete, plaster, screed, cement board, block work and etc, apply priming coat consisting of 1 parts of water to 1 part of **NippoSEAL INTERBIT** to the prepared surface and allow it to dry thoroughly prior to application of neat coat of **NippoSEAL INTERBIT**.

**Application**

This product is designed for trowel, short hair pile roller, brush and air-less spray application. Allow first neat coat of **NippoSEAL INTERBIT** to dry thoroughly, prior to second neat coat application. The second neat coat should be applied in the opposite direction (right angles) to the first coat as this will allow the waterproofing membrane to be distributed more uniformly. Allow the final coat to cure for 24-48 hours before applying protection screed or board.

**Right Angle and Corner Treatment**

Right angle and corner should have 25mm **NippoBOND** modified cement sand angle fillet, apply **NippoSEAL INTERBIT** reinforced with a layer of **NIPPON PAINT LM MAT**, overlaps at minimum 75mm.

**Recommended Waterproofing System**
**Concrete Substrate**

Waterproofing First Coat	: NippoSEAL INTERBIT	0.6 kg/m <sup>2</sup> /coat
Waterproofing Second Coat	: NippoSEAL INTERBIT	0.6 kg/m <sup>2</sup> /coat
Waterproofing Third Coat	: NippoSEAL INTERBIT	0.6 kg/m <sup>2</sup> /coat

**Concrete Substrate (Reinforcement)**

Waterproofing First Coat	: NippoSEAL INTERBIT	1.33 kg/m <sup>2</sup> /coat
Fibre Reinforcement	: NIPPON PAINT LM MAT	1 layer
Waterproofing Second Coat	: NippoSEAL INTERBIT	1.33 kg/m <sup>2</sup> /coat
Waterproofing Third Coat	: NippoSEAL INTERBIT	1.33 kg/m <sup>2</sup> /coat

**Environmental Conditions During Application**

1. Apply temperature: 15-35°C. Do not apply when the surface to be coated is less than 3°C above the dew point.
2. The humidity for application is 30-80%.
3. During application of the paint, naked flame, welding operations and smoking should not be allowed and adequate ventilation should be provided.

**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. Stir the product thoroughly prior to usage. All PU based products are greatly susceptible to attack by moisture and humidity, if not stored properly. It is advised to finish use all the material once opened to avoid skinning.

**Cleaning**

Clean up equipment or tools with clean water immediately after use. Once hardened, it can be removed with white spirit, xylene or similar solvent. Allow the waste to cure, seal it into a suitable container and bury in landfill accordance to local authorities for disposing.

**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.
- 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.

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

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.