



# NIPPON HYCOTE 51WT

*Two Component Water Thinned Epoxy Primer*

## **Product Description :**

**Nippon Hycote 51WT** is two component water thinned epoxy primer barrier coating designed as a universal primer coating for many types of substrate. It is low odour and provides excellent adhesion to the surfaces, such as glazed tiles, glazed brickwork and smooth concrete floor. It is also suitable for use as a barrier / tie coat between ideal single pack coating and two pack solvent based top coats, such as Nippon EA-4 Finish or Nippon PU Recoatable Finish.

## **Physical Characteristics of Paint**

Colour	: Manufactured only in White colour.
Texture	: Low Gloss
Specific gravity	: 1.50 (for mixture of Base and Hardener)
Solid Content	: 46% by volume (ASTM D2697 1973)
Flash Point	: Not Applicable
Recommended no. of coats	: 1 coat
Recommended Film Thickness Per Coat	: 35 ~ 40 microns for dry film 80 ~ 90 microns for wet film
Theoretical coverage	: 13.1 m <sup>2</sup> /litre (for dry film thickness of 35 microns) 11.5 m <sup>2</sup> /litre (for dry film thickness of 40 microns) $\text{Theoretical Coverage} = \frac{\text{Volume Solids (\%)} \times 10}{\text{Dry Film Thickness (\mu)}} \text{ (m}^2\text{/litre)}$
Practical Coverage (20% Loss Factor)	: 10.5 m <sup>2</sup> /litre (for dry film thickness of 35 microns) 9.2 m <sup>2</sup> /litre (for dry film thickness of 40 microns)

Note : 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. For a practical coverage rate, due allowance should be made for atmospheric conditions, surface roughness, geometry or the article being coated, the skill of applicator etc. when estimating quantities required for a particular job.

## **GENERAL PROPERTIES :**

Adhesion : Excellent on correctly prepared surfaces.

Mixing Ratio	: 3 parts by volume of Base to 2 parts by volume of Hardener. Stir the content of the Base component, continue stirring and gradually add the total contents of the Hardener component, continue stirring until a homogeneous mix is obtained.
Pot Life (at 25°C~ 30°C)	: 2 hours after mixing
Shelf Life (at 25°C ~ 30°C)	: 1 year
Thinner / Thinning	: WATER. Normally 10 % thinning is required for airless spray.

Note: All equipment should be cleaned IMMEDIATELY with thinner after use. For thinning, substitute thinners other than those approved or supplied by Nippon Paint may adversely affect the product performance and void product warranty whether express or implied.

**Recommended Painting System**

**FOR GLAZED TILES AND SMOOTH CONCRETE FLOOR**

Sequence	Product Name	No. of Coats
Primer	NIPPON HYCOTE 51WT	1
Finish	NIPPON EA-4 FINISH / NIPPON PU RECOATABLE FINISH	2

**Surface Preparation :**

**WALLS :**

- 1) Existing Coatings : Ensure the surface is free from contamination. Oil and grease must be removed using an approved solvent or detergent solution. All loose or flaking paint should be removed back to a sound substrate.
- 2) Glazed Tiles and Brickwork : Surfaces must be free from contamination and loose material, oil and grease should be removed by detergent washing.
- 3) Blockwork : Surfaces should be free from dirt and contamination, all dust and loose material must be removed.
- 4) Plaster and Cement Rendering : Surfaces should be clean, dry and free from loose material. Any laitance must be removed by mechanical abrasion.

**FLOORS :**

- 1) Existing Coatings : The surfaces should first be degreased using an approved solvent or detergent solution, then mechanically abraded. All loose flaking material and dust must be removed.
- 2) Tiles : Surfaces must be free from dirt, oil grease and other contamination. For wet service conditions the surface of the tile must be mechanically abraded or light abrasive blasted.
- 3) Concrete : Surfaces must be clean, dry and free from oil or grease. All laitance must be removed by mechanical abrasion or light abrasive blasting. All dust and loose material must be removed. New concrete must have cured or a minimum of 28 days.

Drying Time (at 25°C ~ 30°C)	:	Dry to Touch	- 2 hours
	:	Hard Dry	- 8 hours
	:	Dry to Overcoat	- Minimum 4 hours (for Wall).
	:		- Minimum 8 hours (for Floor).
			- Maximum 72 hours (for Floor)
Curing Time (at 25°C ~ 30°C)	:	7 days	

**Note:** Drying time will become remarkably delay under low temperature. Overcoating the previous coat should be done within 6 ~ 7 days but preferably as soon as possible after it has been allowed 16 hours drying or else, it is desirable to roughen it by dry sanding with sandpaper before it is overcoated. This is to ensure proper intercoat adhesion. Exposure of the paint film to water, chemical and abrasion should be avoided as far as possible before full cure of the coating. When chalking occurs, chalks should be removed by water washing. Allow the surface to dry thoroughly prior to overcoating.

**Application Methods** : Brush, roller, compressed air spray and airless spray. Preferably use

	airless spray if a thicker coat is required in one application. Brush, roller, compressed air spray generally lead to lower film thickness, so more applications may be required to obtain the recommended thickness per coat.
1) Spray	: When airless spray is being used, excessive high tip spraying pressure should be avoided. The minimum pressure at the pump conducive with good atomisation should be used.
2) Brush/Roller	: Recommended for small areas and touch-up only. Good quality brushes and mohair/ short nap rollers should be used with full strokes. Avoid rebrushing. Thin up to 10% by volume of <b>WATER</b> for proper flow-out. Additional coats may be required to achieve minimum specified film thickness.
<b><u>Airless Spray Guiding Data</u></b>	
Tip Size	: 11 – 15 Thou
Tip Pressure	: 2,000 p.s.i.
Spray Angle	: 60-70 <sup>o</sup>

Standard Packing	: 5 litres (3 litres Base, 2 litres Hardener) 1 litres (0.6 litres Base, 0.4 litres Hardener)
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<b><u>Environmental Conditions During Application:</u></b>	
1.	Do not apply when the relative humidity exceeds 85% or when the surface to be coated is less than 3°C above the dew point.
2.	The surface temperature for application is 7°C but drying and overcoating times will be considerably extended.
3.	During application of the paint, naked flames, welding operations and smoking should not be allowed and adequate ventilation should be provided.

<b><u>Safety, Health and Environmental Information</u></b>	
1.	Provide adequate ventilation, especial using in confined spaces
2.	Keep container tightly closed and keep out of reach from children.
3.	Do not breathe vapour/spray. Applying paint to large surface areas under closed environment should use air supplied breathing equipment. For small areas or short periods, a suitable cartridge mask should be worn.
	Inhalation : Remove to fresh air, loosen collar and keep patient rested.
	Ingestion : In case of accidental ingestion. DO NOT INDUCE VOMITTING. Seek immediate medical attention.
4.	Avoid contact with skin and eyes. Wear suitable protective coating such as overalls, goggles, dust masks and gloves. Use a barrier cream.
	Eyes : In the event of accidental splashes, flush eyes with water immediately and obtain medical advice.
	Skin : Wash skin thoroughly with soap and water or approved industrial cleaner. DO NOT USE solvent or thinners.
5.	Care must be taken when transporting paint. Keep container in a secure upright position.
6.	Do not empty into drains or watercourses. Dispose of any paint waste in accordance with the appropriate Environmental Quality Regulations.
Note : A Chemical Safety Data Sheet (CSDS) is available upon request.	

NOTE: 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 accuracy of our information or the suitability of our products in any given condition.

We reserve the right to alter the given data without notice.