

## PRODUCT DATA SHEET

**NIPPON 12-01 UNIVERSAL EPOXY PRIMER****Product Description:**

NIPPON 12-01 UNIVERSAL EPOXY PRIMER is a two-pack, high volume solid epoxy universal primer aiming for less volatile organic compounds. As this epoxy coating offers excellent anti-abrasion property and resistant to atmospheric, water, seawater, and cathodic protection.

NIPPON 12-01 UNIVERSAL EPOXY PRIMER is intended for use as Marine coatings and Protective coatings

**Intended Use:**

Universal anticorrosive for all areas in atmospheric and immersion environment, including water tanks, on all kind of substrate. It can be over-coated with various kinds of finishing coats.

**Physical Characteristics of Paint:**

Colour	: Red-Oxide, Grey & other limited colors
Gloss Level	: Semi-Gloss
Volume Solids, %	: $74 \pm 2$ % (for Mixture of Base & Hardener)
VOC	: 272 g/L <sup>(1)</sup> (for Mixture of Base & Hardener)
Flash point	: Base: 24°C                      Hardener: 6°C
Typical Thickness	: 80 – 250µm dry film
	: 108 – 338µm wet film

**Remark:** (1) Base on Grey colour

**Surface Preparation:**

All surfaces should be clean and free from contamination. The surface should be assessed and treated in accordance with ISO 8504. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

**Bare steel**

Bare steel should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007), to achieve surface profile 50 – 85 µm.

**Other Surfaces**

The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.

**NIPPON PAINT (VIETNAM) CO., LTD**

No. 14, 3A Road, Bien Hoa Industrial Zone II, Long Binh Tan Ward, Bien Hoa City, Dong Nai Province, Vietnam  
Tel: (84).251.3836579 – 3836586 (8 lines), Fax: (84).251.3836346 – 3836349

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## Condition During Application:

Avoid paint application when the temperature is below 10°C or relative humidity exceeds 85%. The Steel surface temperature must be minimum 3°C above dew point of the surrounding air.

## Application Data:

<b>Mixing Ratio</b>	:	Base: hardener = 4:1 (by volume) Base and hardener should be mixed thoroughly before use.
<b>Induction time</b>	:	15mins
<b>Pot Life</b>	:	30°C 3 Hrs
<b>Theoretical Coverage</b>	:	9.25 m <sup>2</sup> /litre at 80 µm DFT 2.96 m <sup>2</sup> /litre at 250 µm DFT
<b>Thinner</b>	:	Nippon Thinner 600

<b>Application Method</b>	:	Brush and roll is suitable for stripe coating and very small areas. For best result, use airless spray. Care must be taken to achieve the specified dry film thickness.
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## Application Details

<b>Airless Spray</b>	:	Tip Size	:	0.48-0.59 mm
	:	Pressure at nozzle	:	150 - 200 kg/cm <sup>2</sup>
<b>Typical Thickness</b>	:	125 - 250µm dry film		
	:	169 - 338µm wet film		
<b>Drying Time</b>	:	Substrate Temperature	:	20°C                      30°C
		Surface Dry	:	2hrs                      1hrs
		Through Dry	:	16hrs                    10hrs
		Cured	:	7days                   5days
		Dry to recoat (min)	:	4hrs                    3hrs
		Dry to recoat (max), for immersion	:	30days                14days
		Dry to recoat (max), atmospheric	:	Extended

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

\* Where an "extended" overcoating time is stated, consult Nippon Paint Protective Coatings for recommended surface preparation to achieve optimal inter coat adhesion

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## Recommended Painting System:

The following Intermediate/Topcoat are recommended for Nippon 12-01 UNIVERSAL EPOXY PRIMER

### **Intermediate coat**

- HI-PON 30-02 EPOXY MIO
- NIPPON EP 10-04 STE
- NIPPON PU UNDERCOAT WHITE

### **Topcoat**

- NIPPON 52-01 EPOXY TOPCOAT
- NIPPON PU
- BILAC

For the choice of coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation.

## Packaging:

Unit	Base		Hardener	
	Vol	Container Size	Vol	Container Size
20L	16L	20L	4L	5L
5L	4L	5L	1L	1L

## Storage:

**Shelf life**                      BASE:              18 months (25°C)  
   HARDENER: 18 months (25°C)

Subject to re-inspection thereafter. Higher temperature during storage may reduce the shelf life and may lead to gelling in the tin.

Store in tightly closed container in a dry, cool and well ventilated space, keep away from sources of heat and ignition.

## Safety Precaution

1. This product is intended for use of professional applicators. Refer to the safety information display on the container and in the safety data sheet (SDS) before using the product.
2. Use this product in well-ventilated area, avoid skin contact, spillage on the skin should immediately be removed with suitable cleanser, soap and water.
3. Eye should be well flush with water and seek for medical attention immediately upon contact with this product.
4. During the application, naked flame, welding operation and smoking is not allowed. Adequate ventilation should be provided.
5. If you have any doubt regarding the suitability of use, refer to Nippon Paint for further advice.

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## Disclaimer:

The information in this data sheet is given to the best of Nippon Paint's knowledge and practical experience. Users may consult with Nippon Paint on the general suitability of the product for their needs and specific application practices though it remains each user's responsibility to determine the suitability of the product for the user's particular use. The condition of the substrate and application are not within Nippon Paint's control. Therefore no implied conditions, warranties or other terms will apply to the Product. Nippon Paint does not and cannot warrant the results which the user may obtain by using the product. In no event will Nippon Paint be liable to the user for any kind of loss (whether direct or indirect) even if Nippon Paint was previously advised of it. In line with Nippon Paint's policy for continuous development, Nippon Paint reserves the right to modify the product and the information in this data sheet without prior notice. It is the user's responsibility to check with Nippon Paint for the latest version of this data sheet. This data sheet has been translated into various languages. In the event of any inconsistency, the English version shall prevail.

**NOTE:** *The information given applies to the product and its performance under specific test conditions. Due to the varied circumstances beyond our control under which the product may be applied, for specific application, please contact Nippon Paint Sales & Marketing Dept. We reserve the right to modify our product data sheet without further notice.*

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