



NIPPON AQUA EPOXY

Two Component Water Thinned Epoxy Coating

Product Description :

NIPPON AQUA EPOXY is a two component high performance water-based polyamide amine adduct cured epoxy coating specifically designed for protection of the internal masonry surfaces such as cement or concrete floor, cement or concrete wall, as well as glaze tile with appropriate primer. It is recommended for internal uses and non-immersion services.

NIPPON AQUA EPOXY extensively as an abrasion resistant coating, provides a tough finishing. Being water-based and environmental friendly, the coating during application and curing provides a low odour environment and therefore is ideal for factories, canteen, electronics industries, pharmaceutical and hospital walls and floors, offices and institutions where strong solvent odour is undesirable and foot traffic are rampant.

Physical Characteristics of Paint

Colour	:	As per colour card
Texture	:	Gloss
Specific gravity	:	1.15 kg/L (for mixture of Base and Hardener)
Solid Content	:	50% by volume (ASTM D2697 1973)
Flash Point	:	Not Applicable
Recommended no. of coats	:	2 to 3 coats.
Recommended Film Thickness Per Coat	:	50 ~ 80 microns for dry film 100 ~ 160 microns for wet film
Theoretical coverage	:	10.0 m ² /litre (for dry film thickness of 50 microns) 6.3 m ² /litre (for dry film thickness of 80 microns)

Practical Coverage
(20% Loss Factor)

$$\text{Theoretical Coverage} = \frac{\text{Volume Solids (\%)}}{(\text{m}^2/\text{litre})} \times \frac{10}{\text{Dry Film Thickness (\mu)}}$$

:

8.0 m²/litre (for dry film thickness of 50 microns)
5.0 m²/litre (for dry film thickness of 80 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.

Mixing Ratio

:

4 parts by volume of Base to 1 part 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)
Shelf Life (at 25°C ~ 30°C)

:

1 hour after mixing
1 year

Surface Preparation :

Surfaces should be clean, dry and free from oil, grease and contaminants before painting. For previously painted surfaces, remove all unstable paint film, loose chalk, dust and foreign matter. Repair any surface defects, clean off and dry. Apply 1 coat of Nippon Hycote 51wt for wall & glaze tile, and Nippon Hycote 51wt or Nippon Aqua Epoxy Primer or Nippon Penetrative Epoxy Primer for floor, to improve the adhesion between the top coat and substrate.

Drying Time (at 25°C ~ 30°C) :	<i>Dry to Touch</i> - 4 hours
	<i>Hard Dry</i> - 8 hours
	<i>Dry to Overcoat</i> - Minimum 12 hours

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 12 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

1) Spray	: Thin up 25-30% of water for conventional spray application. 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	: Thin up 5-10% of water is recommended for brush and roll application. Good quality brushes and mohair/ short nap rollers should be used with full strokes. Avoid rebrushing. Additional coats may be required to achieve minimum specified film thickness.

Standard Packing	: 5 litres (4 litres Base, 1 litre Hardener)
------------------	--

Environmental Conditions During Application:

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.

Safety, Health and Environmental Information

1. Provide adequate ventilation, especially 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.