

TECHNICAL DATA SHEET

NIPPON PAINT CURE P

Updated Sept'22

DESCRIPTION

NIPPON PAINT CURE P is a plasticizer free, non-staining, liquid apply water-based polymer curing membrane which when applied to freshly placed concrete or floor hardener. It dries to a transparent film enabling improved curing efficiency of the concrete by reducing loss of water from the concrete.

The coating should be applied in a single coat to achieve a total dry film thickness of not less than 28 microns. To achieve the correct curing properties, **NIPPON PAINT CURE P** must be applied on to the substrate at the coverage rate 5-6m2 per litre.

USES

NIPPON PAINT CURE P is recommended as curing compound for general purpose freshly placed concrete or mortar, for both external and internal applications to the surfaces of concrete structures, including renders, structural and mass concrete, particularly in situations where other conventional means of wet curing are difficult to maintain or where after trades, such as painting is to be applied.

ADVANTAGES

- Enables concrete to hydrate more efficiently
- Minimizes plastic shrinkage cracks
- Compatible with many specific after trades
- Increases concrete strength and dusting resistance
- Eliminates the need for damp hessian, sand or polythene
- Non-staining and maintain concrete natural appearance
- Rapid film formation
- Environmentally friendly
- Non-flammable
- Non-toxic
- Economical

| Product Type | Product | Pack Size | Finishing | Substrate |
|--|------------------------|-----------------------|-----------------|-------------------|
| Surface Treatment (Curing Compound) | NIPPON PAINT CURE P | 20L/pail 210L/drum | Clear after dry | Concrete / Mortar |

Application Data

Mixing Ratio (Weight Ratio) : Part A: Part B = 64: 36

 $\begin{array}{lll} \mbox{Drying Time (25°C -30°C), hours} & : 1-2 \\ \mbox{Recoat Time, hours} & : 12 \\ \mbox{*Theoretical Coverage, kg per m}^2 & : 0.20 \\ \end{array}$

(Actual coverage depends on substrate condition, application method,

application condition, etc.)

Typical Technical Data

Form : Liquid

Colour : Milky white, clear after dry

Density, g/cm³ (Density cup) : 1.01-1.03

Drying Time (Vicat) : 1-2 hours on new concrete

Curing efficiency index (BS 7542) : > 57% Water retention, kg/m^2 (ASTM C156) : < 0.55

*All values given are subject to 5-10% tolerance

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Application Method

Application

Stir or shake **NIPPON PAINT CURE P** thoroughly before using. Apply **NIPPON PAINT CURE P** by roller, brush or low-pressure spray in a homogeneous way. Spray **NIPPON PAINT CURE P** evenly over the freshly laid concrete as soon as possible after final trowelling or final power float after floor hardener is placed just after the disappearance of surface bleed water for maximum water retention (approximately 1 - 2 hours depending on the ambient temperature and atmospheric conditions). If spray equipment is not available, apply with a soft brush, broom or wide nap roller as soon as the concrete surface is hard enough.

Apply to vertical surfaces immediately after the formwork has been removed. Apply at an even coverage rate of not greater than 5-6m² per litre. Ensure the concrete surface is completely free of stains, oils, form coatings etc., to obtain good adhesion of **NIPPON PAINT CURE P** and of any other after trades and to avoid obtaining discolouration or uneven surface effects.

Limitations

- 1. Do not brush on to soft, wet concrete or render surfaces which will be disturbed and thus prevent formation of the curing film.
- 2. Do not be applied to stained, oily or contaminated concrete or render surfaces, which can cause discolouration, non-uniformity, or inhibit the bond of subsequent surface treatments.
- 3. Do not be used as the curing compound for any metallic based integral floor hardeners.
- 4. Do not dilute NIPPON PAINT CURE P with water or any solvent

Recommended Dosage

Coverage

Typical coverage is in the range of 5-6 m² per litre. Coverage may vary with surface profile, porosity of substrate, method of application and condition (temperature, humidity and wind etc) at the job site.

Environmental Conditions During Application

- Apply temperature: 15-35°C. Do not apply when the surface to be coated is less than 32C above the dew point.
- The humidity for application is 30-80%
- 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 12 months shelf life when stored in original bag in a shaded and dry conditions.

Cleaning

Clean up equipment or tools with water immediately after use.

Safety Precautions

- · Always use protective hand gloves, google and dust mask when handling or application
- Any eye contamination should be washed immediately with plenty of clean water and seek for medical advice
- 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.

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

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 theloss 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.



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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.