

**NIPPON PAINT ZINC PHOSPHATE PRIMER (HR)**
*Updated Dec'22*

**NIPPON PAINT ZINC PHOSPHATE PRIMER (HR)** is an alkyd-based rust inhibitive primer for priming on iron and steel. It is used on iron and steel surfaces under non-immersion condition. It is specially formulated to be used on surface having intermittent temperature not exceeding 200°C or continuous temperature exposure not exceeding 150°C.

**Product Features:**

- Intermittent temperature up to 200 °C and continuous temperature up to 150°C
- Excellent corrosion resistance
- Lead and chromate free

Paint Type	Product Type	Finishing	Recommended Substrate	Pack Size
Solvent	Interior & Exterior	Low Gloss Grey	Iron and Steel	1 L & 5 L

**Composition**

Pigment	: Inorganic pigments and extender
Binder	: Alkyd-based
Thinner	: Aromatic

**Technical Data**

Drying Time (25-30°C)	: Touch Dry : Approx 1 hour (Dependent on temperature and humidity)
	: Hard Dry : 6 hours (Dependent on temperature and humidity)
Overcoating Time (25-30°C)	: Minimum 16 hours (Dependent on temperature and humidity)
Typical Thickness	: 30 - 45 µm dry film per coat 55 - 85 µm wet film per coat
No. of Coats	: 1 - 2 coats
Theoretical Coverage	: 18.3 m <sup>2</sup> per litre per coat (for dry film thickness of 30 microns)
	: 12.2 m <sup>2</sup> per litre per coat (for dry film thickness of 45 microns)
Practical Coverage	: 11.0 m <sup>2</sup> /litre (for dry film thickness of 30 microns)
(40% Loss Factor, as a guideline)	: 7.3 m <sup>2</sup> /litre (for dry film thickness of 45 microns)
Volume Solid	: 55 ± 2% by volume
Specific Gravity	: 0.97 – 1.07
Shelf Life	: Up to 48 months in tight sealed container <b>(Subjected to reinspection after exceeding shelf-life period)</b>

**Application Method**

Thinner	: Nippon Paint General Purpose Thinner
Brush / Roller	: If necessary, add up to 5% thinner by volume.
Compressed Air Spray	: If necessary, add about 10% to 15% thinner by volume
Airless Spray	: Delivery pressure : 140 -170 kg/cm <sup>2</sup>
	: Tip size : 0.015" – 0.017"
	: Spray angle : 60° -70°
	: Dilution : Up to 5% thinner by volume

**Recommended Coating System**
**Iron and Steel**

Primer	: Nippon Paint Zinc Phosphate Primer (HR)	: 1 Coat
Intermediate	: Nippon Paint Aluminium Paint (HR)	: 1 Coat
Top Coat	: Nippon Paint Aluminium Paint (HR)	: 1 Coat

**Surface Preparation****STEEL**

The surface to be painted shall be power tool cleaned to minimum **SSPC-SP3 or St 3 ISO 8501- 1:2007**, free from mill scale. It must be dry and free from dirt, grease, oil and other contaminants before application of the paint.

**Cleaning**

Cleaning Solvent : Nippon Paint General Purpose Thinner. Clean up equipment with thinner immediately after use.

**Environmental Conditions During Application**

- 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.
- Do not apply at temperature below 7°C. If not, drying and overcoating times will be considerably extended.
- During application of the paint, naked flame, welding operations and smoking should not be allowed and good ventilation is necessary.

**Safety Precautions**

- Keep container tightly closed and keep out of reach children or away from food and drink.
- In the wet state, this product is highly inflammable. In case of fire, blanket flames with foam, carbon dioxide or dry chemicals.
- Keep away from sources of ignition. No smoking.
- Keep container tightly closed and keep out of reach from children.
- Ensure good ventilation during application and drying.
- 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 VOMITING.** Seek immediate medical attention.
- When applying paint, 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.
- Paint must always be stored in a cool place.
- When transporting paint, care must be taken. Always keep container in a secure upright position.
- Dispose any paint waste in accordance with the appropriate Environment Quality Regulations.

*Note : A Material Safety Data Sheet (MSDS) is available upon request.*

**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. 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.