NIPPON PAINT ZINC RICH PRIMER HS

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NIPPON PAINT ZINC RICH PRIMER HS is a two-pack epoxy shop primer for use on abrasive blasted steel prior to application of final paint system. It is recommended where high level of corrosion resistance is required.

Product Features:

- Anti-Rust
- Zinc dust pigment complies with ASTM D520 (Type II)
- Conform to Level 2 under SSPC-Paint 20 (Zinc Dust Level Classification)
- Good resistance to abrasion and mchanical damage
- Excellent on correctly prepared surfaces
- Available in Grey Colour

Paint Type	Product Type	Finishing	Recommended Substrate	Pack Size
Solvent based	Interior & Exterior	Matt	Iron and Steel	5 L (3.88L Base and 1.12L Hardener) 20 L (15.52L Base and 4.48L Hardener)

Composition

Pigment	: Zinc dust and Extender
Binder	: Epoxy & Polyamide
Thinner	: Combination of aromatic, ketone and alcohol

Technical Data

Drying Time (25-30°C)	: Touch Dry : Approximately 10 minutes : Hard Dry : 4 hours
Overcoating Time (25-30°C)	: Minimum 8 hours
Curing Time (25-30°C)	: 2 - 3 days (Dependent on temperature and humidity).
Typical Thickness	: 25 - 75 µm dry film per coat 50 - 150 µm wet film per coat
No. of Coats	: 1 coat
Theoretical Coverage	: 20.0 m^2/litre (for dry film thickness of 25 microns) 6.70 m^2/litre (for dry film thickness of 75 microns)
Practical Coverage (40% Loss Factor, as a guideline)	: 12.0 m^2/litre (for dry film thickness of 25 microns) 4.0 m^2/litre (for dry film thickness of 75 microns)
Volume Solid	: 63 ± 2% by volume
Specific Gravity	: 1.95 – 2.05 (for mixture of Base and Hardener)
Mixing Ratio	: 3.88 parts by volume of Base to 1.12 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 (25-30C)	: 4 - 6 hours after mixing
Shelf Life	: Up to 24 months in tight sealed container **(Subjected to reinspection after exceeding shelf-life period)**

Application Method

Brush, compressed air spray and airless spray. Preferably use airless spray if a thicker coat is required in one application. Brush and compressed air spray generally lead to lower film thickness, so more applications may be required to obtain the recommended thickness per coat. For touching up small areas brush can be used. Roller is not recommended for 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. Brush and roller are recommended for small areas and touch-up only. 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.

For thinning, substitute thinners other than those approved or supplied by Nippon Paint may adversely affect the product performance and void product warranty whether expressed or implied.

Drying time will become remarkably delayed under low temperature. Overcoating the previous coat of Nippon Paint Zinc Rich Primer HS 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.

Thinner	: SA-65 Thinner
Brush	: 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^2
	: 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 Rich Primer HS	: 1 Coat
Intermediate	: Nippon Paint 8048	: 1 Coat
Top Coat	: Nippon Paint PU Recoatable Finish	: 1 Coat
Primer	: Nippon Paint Zinc Rich Primer HS	: 1 Coat
Intermediate	: Nippon Paint Epoxy Sealcoat	: 1 Coat
Top Coat	: Nippon Paint PU Recoatable Finish	: 1 Coat
Primer	: Nippon Paint Zinc Rich Primer HS	: 1 Coat
Intermediate	: Nippon Paint 8048	: 1 Coat
Top Coat	: Nippon Paint EA4 Finish (EP)	: 1 Coat

Surface Preparation

The surface to be painted should be abrasive blasted to minimum **SSPC -SP10 or Sa 2½ ISO 8501-1:2007.** It is important that the standard should be maintained until the paint is applied on. If rust bloom begins to form before the steel surface is coated, it will be necessary to reblast the steel. The surface must be dry and free from abrasive residues and other contaminants before the paint is applied.

Cleaning

Cleaning Solvent : SA-65 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.
- Ensure good ventilation during application and drying.
- During application of paint, naked flames, welding operation, and smoking should not be allowed.

- 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 off any paint 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. 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.