

NIPPON PAINT ZINC PHOSPHATE PRIMER FD
Updated Aug'22

NIPPON PAINT ZINC PHOSPHATE PRIMER FD is an alkyd-based rust inhibitive primer for priming on iron and steel. It is recommended for iron and steel surfaces under non-immersion condition.

Product Features:

- Anti-Rust
- Fast dry
- Available in Reddish Brown, Grey Green and Light Grey Colour

| Paint Type | Product Type | Finishing | Recommended Substrate | Pack Size |
|---------------|---------------------|-----------|-----------------------|------------------------------|
| Solvent based | Interior & Exterior | Low Gloss | Iron and Steel | 1 Litre, 5 Litres, 20 Litres |

Composition

| | |
|---------|--------------------------|
| Pigment | : Anti rust and Extender |
| Binder | : Alkyd |
| Thinner | : White spirit |

Technical Data

| | | |
|--|--|--|
| Drying Time (25-30°C) | : Touch Dry | : Approximately 15 minutes (Dependent on temperature and humidity) |
| | : Hard Dry | : 4 hours (Dependent on temperature and humidity) |
| Overcoating Time (25-30°C) | : Minimum 8 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 ² /litre (for dry film thickness of 30 microns) 12.2 m ² /litre (for dry film thickness of 45 microns) | |
| Practical Coverage (40% Loss Factor, as a guideline) | : 11.0 m ² /litre (for dry film thickness of 30 microns) 7.3 m ² /litre (for dry film thickness of 45 microns) | |
| Volume Solid | : 55 ± 3% by volume | |
| Specific Gravity | : 1.36 - 1.46 | |
| Shelf Life | : Up to 24 months in tight sealed container (Subjected to reinspection after exceeding shelf-life period) | |

Application Method

| | | |
|----------------------|---|--------------------------------|
| Thinner | : Nippon Paint General Purpose Thinner | |
| Brush/ Roller | : If necessary, add about 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 Phosphate Primer FD | : 1 Coat |
| Intermediate | : Nippon Paint Protective Finish FD | : 1 Coat |
| Top Coat | : Nippon Paint Protective Finish FD | : 1 Coat |

| | | |
|--------------|---|----------|
| Primer | : Nippon Paint Zinc Phosphate Primer FD | : 1 Coat |
| Intermediate | : Nippon Paint Micaceous Iron Oxide | : 1 Coat |
| Top Coat | : Nippon Paint Protective Finish FD | : 1 Coat |
| Primer | : Nippon Paint Zinc Phosphate Primer FD | : 1 Coat |
| Intermediate | : Nippon Paint Micaceous Iron Oxide | : 1 Coat |
| Top Coat | : Nippon Paint Micaceous Iron Oxide | : 1 Coat |
| Primer | : Nippon Paint Zinc Phosphate Primer FD | : 1 Coat |
| Intermediate | : Nippon Paint Aluminium Paint | : 1 Coat |
| Top Coat | : Nippon Paint Aluminium Paint | : 1 Coat |

Surface Preparation

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.
- 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.

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

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.