TECHNICAL DATA SHEET

NIPPON PAINT RED OXIDE PRIMER

NIPPON PAINT RED OXIDE PRIMER is an alkyd based primer used as an economical protective coating for iron and steel surfaces under non-immersion condition.

Product Features:

- Fast dry
- Available in Reddish Brown

Paint Type	Product Type	Finishing	Recommended Substrate	Pack Size
Solvent based	Interior & Exterior	Low Gloss	Iron and steel	1 Liter, 5 Liters, 20 Liters

Composition

Pigment	: Iron oxide and Extender
Binder	: Alkyd
Thinner	: White spirit

Technical Data

Drying Time (25-30°C)	: Touch Dry : Approximately 1 hour (Dependent on temperature and humidity)
	: Hard Dry : 5 hours (Dependent on temperature and humidity)
Overcoating Time (25-30°C)	: Minimum 5 hours (Dependent on temperature and humidity) (Overcoat after hard dry)
Typical Thickness	: 30 – 45 microns dry film per coat 60 – 90 microns wet film per coat
No. of Coats	: 1 – 2 coats
Theoretical Coverage	: 17.5 m^2/liter (for dry film thickness of 30 microns)
	: 11.7 m^2/liter (for dry film thickness of 45 microns)
Practical Coverage (40%	: 10.5 m^2/liter (for dry film thickness of 30 microns)
Loss Factor, as a guideline)	: 7.0 m^2/liter (for dry film thickness of 45 microns)
Volume Solid	: 50 ± 2% by volume
Specific Gravity	: 1.28 – 1.38
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

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 ℃ above the dew point.
- Do not apply at temperature below 7 ℃. 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.

Recommended Coating System

Iron and Steel

Primer	: Nippon Paint Red Oxide Primer	: 1 Coat
Intermediate	: Nippon Paint Protective Finish FD	: 1 Coat
Top Coat	: Nippon Paint Protective Finish FD	: 1 Coat
Primer	: Nippon Paint Red Oxide Primer	: 1 Coat
Intermediate	: Nippon Paint Micaceous Iron Oxide	: 1 Coat
Top Coat	: Nippon Paint Protective Finish FD	: 1 Coat
Primer	: Nippon Paint Red Oxide Primer	: 1 Coat
Intermediate	: Nippon Paint Micaceous Iron Oxide	: 1 Coat
Top Coat	: Nippon Paint Micaceous Iron Oxide	: 1 Coat
Primer	: Nippon Paint Red Oxide Primer	: 1 Coat
Intermediate	: Nippon Paint Aluminium Paint	: 1 Coat
Top Coat	: Nippon Paint Aluminium Paint	: 1 Coat
Primer	: Nippon Paint Red Oxide Primer	: 1 Coat
Intermediate	: Nippon Paint PUR Lite Finish	: 1 Coat
Top Coat	: Nippon Paint PUR Lite Finish	: 1 Coat

Note

Theoretical Coverage is based on a mathematical formula and does not consider Loss Factor.

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

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.