

NIPPON PAINT ETCHING PRIMER 120
Updated Jan'25

NIPPON PAINT ETCHING PRIMER 120 is a two-pack, acid-catalysed etching primer formulated with polyvinyl butyral based resin which offer good adhesion properties. It is recommended to be used on blast cleaned steel, galvanized steel and light alloys as a suitably primed base for most coatings to adhere satisfactorily.

Product Features:

- Good adhesion

| Paint Type | Product Type | Finishing | Recommended Substrate | Pack Size |
|---------------|---------------------|---------------------|--|-------------------------------|
| Solvent based | Interior & Exterior | Matt Olive Green | Blast cleaned steel, galvanized steel and light alloys | 5 L (4L Base and 1L Hardener) |

Composition

| | |
|---------|-----------------------------------|
| Pigment | : Anti rust and Extender |
| Binder | : Polyvinyl butyral based resin |
| Thinner | : Mixture of hydrocarbon solvents |

Technical Data

| | | |
|-----------------------------------|---|---|
| Drying Time (25-30°C) | : Touch Dry | : Approximately 5 minutes (Dependent on temperature & humidity) |
| | : Hard Dry | : 1 hour (Dependent on temperature & humidity) |
| Overcoating Time (25-30°C) | : Minimum 4 hours (Dependent on temperature & humidity) | |
| Typical Thickness | : 12 µm dry film per coat 60 µm wet film per coat | |
| No. of Coats | : 1 coat | |
| Theoretical Coverage | : 16.7 m ² /litre (for dry film thickness of 12 microns) | |
| Practical Coverage | : 10.0 m ² /litre (for dry film thickness of 12 microns) | |
| (40% Loss Factor, as a guideline) | | |
| Volume Solid | : 20 ± 2% by volume | |
| Specific Gravity | : 0.85 - 1.00 (for mixture of Base and Hardener) | |
| Mixing Ratio | : 4 parts by volume of Base to 1 part by volume of Hardener. <i>(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.)</i> | |
| Pot Life (25-30°C) | : 18 - 24 hours after mixing | |
| Shelf Life | : Up to 24 months in tight sealed container (Subjected to reinspection after exceeding shelf-life period) | |

Application Method

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|----------------------|---|--------------------------------|
| Thinner | : Nippon Paint Vinilex 510 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 & Galvanised Steel

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|--------------|-------------------------------------|----------|
| Primer | : Nippon Paint Etching Primer 120 | : 1 Coat |
| Intermediate | : Nippon Paint Protective Finish FD | : 1 Coat |

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|--------------|-------------------------------------|---------------|
| Top Coat | : Nippon Paint Protective Finish FD | : 1 Coat |
| Primer | : Nippon Paint Etching Primer 120 | : 1 Coat |
| Intermediate | : Nippon Paint Micaceous Iron Oxide | : 1 Coat |
| Top Coat | : Nippon Paint Protective Finish FD | : 1 Coat |
| Primer | : Nippon Paint Etching Primer 120 | : 1 Coat |
| Intermediate | : Nippon Paint Micaceous Iron Oxide | : 1 Coat |
| Top Coat | : Nippon Paint Micaceous Iron Oxide | : 1 Coat |
| Primer | : Nippon Paint Etching Primer 120 | : 1 Coat |
| Intermediate | : Nippon Paint 8048 | : 1 Coat |
| Top Coat | : Nippon Paint PU Recoatable Finish | : 1 Coat |
| Primer | : Nippon Paint Etching Primer 120 | : 1 Coat |
| Top Coat | : Nippon Paint PU Recoatable Finish | : 1 - 2 Coats |

Surface Preparation

For galvanised surfaces and light alloys, thorough solvent degreasing to **SSPC-SP1** is necessary. For steel, abrasive blast at **Sa 2½ ISO 8501-1:2007** is required. All surfaces must be dry and free from contaminants such as dirt, wax, grease, oil, white zinc salts etc. before application of the paint.

Cleaning

Cleaning Solvent : Nippon Paint Vinilex 510 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 as 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 of 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.

