

NIPPON PAINT 8048 MIO
Updated Aug'22

NIPPON PAINT 8048 MIO is a two-pack epoxy polyamide coating pigmented with Micaceous Iron Oxide. It provides a high build impervious barrier coating that gives excellent adhesion and surface wetting properties on appropriate primed steelwork. This barrier coating also provides excellent corrosion resistance. The Micaceous Iron Oxide will further enhance the mechanical and chemical resistance of the coating. **NIPPON PAINT 8048 MIO** can be used as self-priming high build finish under non-immersion service.

Product Features:

- Good resistance to abrasion and mechanical damage
- Excellent adhesion on correctly prepared and primed surfaces
- Dry service temperature range up to 100°C
- Available in Grey Black, Dark Grey and Silver Colour

Paint Type	Product Type	Finishing	Recommended Substrate	Pack Size
Solvent based	Interior	Semi-Gloss	Steel	5 L (2.5L Base and 2.5L Hardener) 20 L (10L Base and 10L Hardener)

Composition

Pigment	: Extender, Micaceous Iron Oxide
Binder	: Epoxy
Thinner	: Combination of aromatic, ketone and alcohol

Technical Data

Drying Time (25-30°C)	: Touch Dry : 3-4 hour : Hard Dry : 16 hours
Overcoating Time (25-30°C)	: Minimum 16 hours
Curing Time (25-30°C)	: 6-7 days (Dependent on temperature and humidity).
Typical Thickness	: 100 ~ 250 microns for dry film 110 ~ 280 microns for wet film
No. of Coats	: 1 - 2coat
Theoretical Coverage	: 9.0 m ² /litre (for dry film thickness of 100 microns) 3.6 m ² /litre (for dry film thickness of 250 microns)
Practical Coverage (40% Loss Factor, as a guideline)	: 5.4 m ² /litre (for dry film thickness of 100 microns) 2.2 m ² /litre (for dry film thickness of 250 microns)
Volume Solid	: 90 ± 2% by volume
Specific Gravity	: 1.34 (for mixture of Base and Hardener)
Mixing Ratio	: 1 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 (25-30C)	: 3 - 4 hours after mixing
Shelf Life	: Up to 24 months in tight sealed container (Subjected to reinspection after exceeding shelf-life period)

Application Method

Brush, roller, compressed air spray and airless spray. Preferably use airless spray if a thicker coat is required in one application. Brush, roller, compressed air spray generally lead to lower film thickness, so more applications may be required to obtain the recommended thickness per coat. For brush and roller recommended for small areas and touch-up only. Good quality brushes and mohair/ short nap rollers should be used with full strokes. Avoid re-brushing. Thin up to 10% - 15% by volume of SA-65 Thinner for proper flow-out. Additional coats may be required to achieve minimum specified film thickness. 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.

Thinner	: SA-65 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 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 8048 Zinc Phosphate QD / Nippon Paint Zinc Rich Primer HS / Nippon Paint NIOZ / Nippon Paint Nippezinc E2 Primer	: 1 Coat
Intermediate	: Nippon Paint 8048 MIO	: 1 Coat
Top Coat	: Nippon Paint Polyurethane Recoatable Finish/ Nippon Paint EA4 Finish (EP)	: 1 Coat

** For steel structure, the surface must be primed with 1 coat of appropriate primer before application of Nippon Paint 8048 MIO. Primers recommended are epoxy primers, epoxy zinc primer or ethyl silicate zinc primer.*

Surface Preparation

The surface must be dry and free from any abrasive residues, dirt, oil and grease, and other contaminants prior to painting. For steel structure, the surface must be primed with 1 coat of appropriate primer before application of Nippon Paint 8048 MIO. Primers recommended are epoxy primers, epoxy zinc primer or ethyl silicate zinc primer.

Cleaning

Cleaning Solvent : SA-65 Thinner. All equipment should be cleaned IMMEDIATELY with thinner after use. 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

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 adequate ventilation should be provided.

Safety Precautions

- 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.
- 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.
- Avoid contact with skin and eyes. Wear suitable protective coating such as overalls, goggles, dust masks and gloves. Use a barrier cream.

Eyes	:	In the event of accidental splashes, flush eyes with water immediately and obtain medical advice.
Skin	:	Wash skin thoroughly with soap and water or approved industrial cleaner. DO NOT USE solvent or thinners.
- Care must be taken when transporting paint. Keep container in a secure upright position.
- Do not empty into drains or watercourses. Dispose of any paint waste in accordance with the appropriate Environmental Quality Regulations.

Note : A Chemical Safety Data Sheet (CSDS) 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.