

## **TECHNICAL DATA SHEET**

# NIPPON PAINT 8048 ZINC PHOSPHATE PRIMER QD

Updated Jan'25

NIPPON PAINT 8048 ZINC PHOSPHATE PRIMER QD is a surface tolerant/mastic, high build two-pack epoxy polyamide coating capable of providing up to 250 microns dry film thickness per coat. It combines superior barrier properties with excellent wetting and adhesive characteristics. Its unique combination of anti-corrosion pigments and rust penetrants provides excellent corrosion resistance in virtually any environment. It can be applied over wire brushed rusty steel where abrasive blasting is not possible. NIPPON PAINT 8048 ZINC PHOSPHATE PRIMER QD can be used as self-priming high build finish under non-immersion service.

#### **Product Features:**

- Excellent corrosion resistance
- Can be used as a self-finishing interior system against wide range industrial chemicals
- Outstanding tolerance to manually prepared surfaces
- Available in Reddish Brown and Pearl Grey

| Paint Type    | Product Type | Finishing | Recommended<br>Substrate | Pack Size                         |
|---------------|--------------|-----------|--------------------------|-----------------------------------|
| Solvent based | Interior     | Low Gloss | Steel, Aluminium/zinc    | 5 L (2.5L Base and 2.5L Hardener) |
|               |              |           | alloy coated steel       | 20 L (10L Base and 10L Hardener)  |

Composition

Pigment : Extender, Zinc Phosphate

Binder : Epoxy

Thinner : Combination of aromatic, ketone and alcohol

**Technical Data** 

Drying Time (25-30 $^{\circ}$ 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  $^{\sim}$  280 microns for wet film

No. of Coats : 1 - 2coat

Theoretical Coverage : 9.0 m2/litre (for dry film thickness of 100 microns)

3.6 m2/litre (for dry film thickness of 250 microns)

Practical Coverage : 5.4 m2/litre (for dry film thickness of 100 microns) (40% Loss Factor, as a 2.2 m2/litre (for dry film thickness of 250 microns):

guideline)

Volume Solid :  $90 \pm 2\%$  by volume

Specific Gravity : 1.25 - 1.35 (for mixture of Base and Hardener)

Mixing Ratio : 1 part by volume of Base to 1 part by volume of Hardener.

(Stir the content of the Base component, continue stirring and gradually add the total content of the Hardener component, continue stirring until a homogeneous mix is obtained.)

Pot Life (25-30C) : 3 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. 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



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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 :  $140-170 \text{ kg/cm}^2$ 

: Tip size : 0.015" – 0.017"

: Spray angle : 60° - 70°

: Dilution : Up to 5% thinner by volume

## **Recommended Coating System**

#### Iron / Steel /

### Aluminium/Zinc Alloy

#### **Coated Steel**

Primer : Nippon Paint 8048 Zinc Phosphate Primer QD : 1 Coat Intermediate : Nippon Paint 8048 : 1 Coat Top Coat : Nippon Paint PU Recoatable Finish : 1 Coat

Primer : Nippon Paint 8048 Zinc Phosphate Primer QD : 1 Coat Intermediate : Nippon Paint 8048 : 1 Coat Top Coat : Nippon Paint EA4 Finish (EP) : 1 Coat

### **Surface Preparation**

For optimum performance, abrasive blasting in accordance to **SSPC-SP10 or Sa 2½ ISO 8501-1:2007** is desirable. Average of surface profile 50 - 100 microns is acceptable. The surface to be coated must be clean and dry. Zinc salts can be removed by fresh water wash and scrubbing. Dry brushing should be sufficient to remove dirt. Where abrasive blasting is not possible, mechanical cleaning to **St 3 ISO 8501-1:2007** standard is acceptable.

#### 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.

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.



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• 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.

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

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.