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NIPPON 8048 ZINC PHOSPHATE PRIMER QD

Product Description:

NIPPON 8048 ZINC PHOSPHATE PRIMER QD is a high build epoxy coating capable of providing up to 250 microns dry film thickness per coat. It combines superior barrier properties with excellent wetting and adhesive characteristics. It can be applied over wire brushed rusty steel where abrasive blasting is not possible.

Physical Characteristics of Paint:

Colour	: Reddish Brown and Pearl Grey
Texture	: Low Gloss
Specific Gravity	: 1.25 - 1.35 (for mixture of base and hardener)
Solid Content	: 90 ± 2% by volume (ASTM D2697 1973)

Recommendation For Use:

Surface Preparation:

1. For optimum performance, abrasive blasting in accordance to **Sa 2½ ISO 8501-1:1988** is desirable.
2. Average of surface profile 50 - 100 microns is acceptable.
3. 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.
4. Where abrasive blasting is not possible, mechanical cleaning to St 3 ISO 8501-1:1988 standard is acceptable.

Recommended No. Of Coats : 1 - 2 coats

Recommended Film Thickness Per Coat : 100 ~ 250 microns for dry film
110 ~ 280 microns for wet film

Theoretical coverage at Recommended Film Thickness : 9.0 m²/litre (for dry film thickness of 100 microns)
3.6 m²/litre (for dry film thickness of 250 microns)

$$\text{Theoretical Coverage (m}^2\text{/litre)} = \frac{\text{Volume Solids (\%)} \times 10}{\text{Dry Film Thickness (\mu)}}$$

Practical Coverage (20% Loss Factor) : 7.2 m²/litre (for dry film thickness of 100 microns)
2.8 m²/litre (for dry film thickness of 250 microns)

Note : 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.

Performance Data:

Adhesion to Steel (ASTM D 002)	: 2500 P.S.I. (170 kg/cm ²)
Impact Resistance (BS3900)	: Direct, Pass 0.2" Reverse, Pass 0.2"
Hot Salt Spray (ASTM B117)	: No corrosion after 2500 hours
Sea Water Immersion (BS3900)	: No corrosion after 2500 hours
Humidity Cabinet (BS3900)	: No change in coating after 1000 hours

General Properties:

1. Outstanding tolerance to manually prepared surfaces.
2. Excellent corrosion resistance through a combination of anti-corrosion pigments and rust penetrants.
3. High tolerance where application over conventional coating systems such as aged alkyd system.
4. Excellent resistance to penetration by moisture and corrosive ions.
5. Simple application properties by brush or spray, a single coat of Nippon 8048 Zinc Phosphate Primer QD offers effective corrosion resistance in most industrial environments.
6. Can be used as a self-finishing system against a wide range of industrial chemicals.
7. Can be overcoated with a wide range of topcoats.
8. Provides a tough durable film with good weathering properties and excellent abrasion resistance.
9. Withstands continuous dry heat up to 100°C.
10. Slight chalking under continuous exposure to sunlight but without detriment to performance characteristic other than slight reduction in gloss.

Application Methods

: 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.

1) Brush/Roller

: Recommended for small areas and touch-up only. Good quality brushes and mohair/ short nap rollers should be used with full strokes. Avoid rebrushing. 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.

2) Spray

: 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.

Guiding Data For Airless Spray

: Delivery Pressure : 140-170 kg/cm²
 : Tip Size : 0.015"-0.017"
 : Spray Angle : 60° - 70°

Thinning

: If necessary, add up to 5% thinner by volume for application by brush, roller and airless spray; about 10%-15% by volume for application by compressed air spray.

Mixing Ratio

: 1 part by volume of **Nippon 8048 Zinc Phosphate Primer QD (Base)** to 1 part by volume of **Nippon 8048 Zinc Phosphate Primer QD (Hardener)**. Stir the content of the base component, continue stirring the hardener and gradually add the total contents of the hardener component, continue stirring until a homogeneous mix is obtained.

Pot Life at 25°C to 30°C

: 3 hours after mixing

Thinner

: SA-65 Thinner

Cleaning Solvent

: SA-65 Thinner

Note: 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.

Drying Time at 25°C to 30°C : Dry to touch - 3-4 hours
 : Dry to handle - 16 hours
 : Dry to overcoat - Minimum 16 hours

Curing Time at 25°C to 30°C : 6 - 7 days

Note: Drying time will become remarkably delayed under low temperature. Overcoating the previous coat of Nippon 8048 Zinc Phosphate Primer QD should be done within 6 ~ 7 days but preferably as soon as possible after it has been allowed 16 hours drying or else, it is desirable to roughen it by dry sanding with sandpaper before it is overcoated. This is to ensure proper intercoat adhesion. Exposure of the paint film to water, chemical and abrasion should be avoided as far as possible before full cure of the coating. When chalking occurs, chalks should be removed by water washing. Allow the surface to dry thoroughly prior to overcoating.

Standard Packing : 5 litres (2.5 litres Base, 2.5 litres Hardener)
 : 20 litres (10 litres Base, 10 litres Hardener)

Shelf Life at 25°C to 30°C : 2 years

Environmental Conditions During Application:

1. 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.
2. Do not apply at temperature below 7°C. If not, drying and overcoating times will be considerably extended.
3. During application of the paint, naked flame, welding operations and smoking should not be allowed and adequate ventilation should be provided.

Safety, Health and Environmental Information:

1. In the wet state, this product is highly inflammable. In case of fire, blanket flames with foam, carbon dioxide or dry chemicals.
2. Keep away from sources of ignition. No smoking.
3. Keep container tightly closed and keep out of reach from children.
4. 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.
5. 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.
6. Care must be taken when transporting paint. Keep container in a secure upright position.
7. 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:

1. This product is not suitable for use under immersed conditions.
2. Do not apply to oleoresinous paint systems or recently applied alkyds (i.e. less than 6 months old)

NOTE :

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 accuracy of our information or the suitability of our products in any given condition.

We reserve the right to alter the given data without notice.