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PRODUCT DATA SHEET

NIPPON ZINC PHOSPHATE BLAST PRIMER

Product Description:

NIPPON ZINC PHOSPHATE BLAST PRIMER is a two-pack Epoxy-Amin anti-corrosive primer with non-toxic Zinc Phosphate as its pigment. It is recommended for use in combination with Nippon EA-4 Finish, Nippon EA-9 Finish and Nippon Polyurethane Finish for corrosive environment.

Physical Characteristics of Paint:

Colour	: Reddish Brown and Grey
Finish	: Matt
Specific Gravity	: 1.33 ± 0.05 (for Mixture of Base & Hardener)
Solid Content	: 46 ± 2 by volume (for Mixture of Base & Hardener)
Abrasion	: Cured film is very hard, extremely abrasion resistant and can withstand considerable mechanical impact without damage.
Adhesion	: Excellent. Detachment of the coating does not occur under normal condition.
Chemical Resistance	: Excellent resistance to a wide range of organic and inorganic chemicals, salt solution, solvents, detergents and household cleaners.
Weathering	: Not recommended for direct exposure to sunlight. It is always used as a base coat in conjunction with a Nippon Polyurethane finish coat.
Temperature	: Dry service temperature range up to 100°C

Performance Characteristics:

- Resistant to splash, spillage and immersion in a wide range of chemicals, fresh water, etc
- Excellent mechanical film properties such as Film Hardness, Adhesion, Scratch Resistance and Abrasion Resistance
- Easy application by brush, roller and spray

Recommendation for Use:

Surface Preparation

Mild Steel Surfaces

For optimum performance, abrasive blasting in accordance to SA-2.5 Standard is desirable. It is important that the standard should be maintained until the paint is applied on. If the steel changes colour or rust bloom begins to form, it will be necessary to reblast the steel. The surface must be dry and free from any abrasive residues, dirt, oil and grease and other contaminants prior to painting.

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Galvanised Steel Surface

New galvanised surface requires to be degreased in accordance to SSPC-SP1. For old galvanised surface, it must be abraded to remove corrosion deposits. Shop-prime with a suitable etching primer e.g. NIPPON VINILEX 120 ACTIVE PRIMER. All surfaces must be dry and free from oil and grease prior to painting.

Aluminium and Stainless Steel Surface

For optimum performance, the surface must be lightly abrasive blasted. If blasting is not possible, abrade with 120 grade paper, clean and dry prior to painting. Shop-prime with a suitable etching primer e.g. NIPPON VINILEX 120 ACTIVE PRIMER. All surfaces must be dry and free from oil and grease prior to painting.

Recommended No. of Coats	: 1 - 2 coats
Recommended Film Thickness per coat	: 60 microns for dry film 131 microns for wet film
Theoretical Coverage at Recommended Film Thickness	: 7.6 m ² / liter (for dry film thickness of 60 microns)
	$\text{Theoretical Coverage (m}^2/\text{liter)} = \frac{\text{Volume Solid (\%)} \times 10}{\text{Dry Film Thickness (\mu)}}$
Practical Coverage (20% Loss Factor)	: 6.1 m ² / liter (for dry film thickness of 60 microns)

Note : This theoretical coverage rate has been calculated from the volume solid 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.

Application Data:

Application Methods	:	Brush, roller, compressed air spray and airless spray	
Guiding Data for Spray	:	<u>Air</u>	<u>Airless</u>
		Delivery Pressure (kg/cm ²)	3 - 4 140 - 170
		Tip size at 60° angle	1.3 mm 0.015" - 0.017"
Thinning	:	Roller & Brush	10% maximum
		Air Spray	25% maximum
		Airless Spray	5% maximum
Mixing Ratio	:	9 parts by volume of NIPPON ZINC PHOSPHATE BLAST PRIMER (BASE) to 1 part by volume of NIPPON ZINC PHOSPHATE 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. Dilution should be done after the addition of hardener.	
Pot Life at 25°C to 30°C	:	8 - 10 hours after mixing, depending on prevailing temperature	

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Thinner : NIPPON SA 65 THINNER

Cleaning Solvent : NIPPON 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 : 30 minutes

Dry to handle : 4 - 5 hours

Dry to overcoat : Minimum 16 hours. Maximum 15 days. Recoating of a fully cured NIPPON ZINC PHOSPHATE BLAST PRIMER may results in poor adhesion to the previous coats and sanding is a must to avoid this.

Curing time at 25°C to 30°C : 5 - 7 days

Note: Drying time will become remarkable under low temperature. Overcoating the previous coat of NIPPON ZINC PHOSPHATE BLAST PRIMER 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 Liters (4.5 Liters BASE & 0.5 Liter HARDENER)
20 Liters (18 Liters BASE & 2 Liters HARDENER)

Environmental Conditions during Application:

1. Do not apply when the relative humidity exceeds 85%. The temperature of the substrate to be painted must be 3°C higher than the dew point.
2. Do not apply at temperature below 7°C. If not, drying and overcoating time will be considerably extended.
3. During application of the paint, naked flame, welding operations and smoking should not be allowed and good ventilation is necessary.

Safety, Health and Environmental Information:

1. Flammable Liquid. Do not expose to heat, sparks or open flame.
2. Skin Contact: May cause moderate skin irritation. Avoid prolong contact with skin. Use solvent resistant glove. To remove splashes of paint from skin, use soap and water.
3. Inhalation: Respiratory irritation. Only used in well ventilated areas. Do not breathe vapor or spray paint. Respirator with organic vapor cartridges recommended.
4. Eye Contact: Cause severe eye irritation and blurred vision. Safety glasses / goggles with side shields recommended. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
5. Ingestion: Harmful if swallowed. Keep away from drinks, food and out of reach of children. If swallowed, seek medical advice immediately and show the container or label.
6. In the event of an accident, contain and collect spillage using sand or earth or absorbent. Do not empty into drain or water courses.

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7. Wastes and empty containers should be treated and disposed of in accordance with national and local regulations. Empty containers and packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor.

NOTE: *The information given applies to the product and its performance under specific test conditions. Due to the varied circumstances beyond our control under which the product may be applied, for specific application, please contact Nippon Paint Sales & Marketing Dept. We reserve the right to modify our product data sheet without further notice.*