NIPPON EA9 RED OXIDE PRIMER

Product Description:

NIPPON EA9 RED OXIDE PRIMER is a two-pack amine-adduct cured epoxy designed for use as a high performance primer for many types of surfaces i.e. aluminium, galvanising, steelwork, concrete, GRP and phenolic sheeting. Nippon EA9 primer/finish systems have been extensively used for long term corrosion of both ferrous and non ferrous surfaces within the civil engineering and building industry, and as lining systems for potable water, chemical and fuel storage tanks, palm oil derivatives and vegetable oil.

Physical Characteristics of Paint:

Colour	:	Red Oxide
Texture	:	Low Gloss
Specific Gravity	:	1.20 - 1.40 (for mixture of base and hardener)
Solid Content	:	50 ± 2 % by volume (ASTM D2697 1973)
Abrasion	:	Good resistance to abrasion and mechanical damage.
Adhesion	:	Excellent on correctly prepared surfaces.
Chemical Resistance	:	The fully cured coating offers outstanding resistance to aqueous solutions and a wide range of industrial chemicals.
Temperature	:	Dry service temperature range up to 100°C.

Recommendation For Use:
Surface Preparation:

Mild Steel Surfaces

For optimum performance, abrasive blasting in accordance to **Sa 2½ ISO 8501-1:1988** 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.

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. 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.

Recommended No. Of Coats	:	1 - 2 coats
Recommended Dry Film Thickness Per Coat	:	60 ~ 80 microns for dry film 120 ~ 160 microns for wet film
Theoretical coverage at recommended dry film thickness	:	8.3 m^2/litre (for dry film thickness of 60 microns) 6.2 m^2/litre (for dry film thickness of 80 microns) Theoretical Coverage = $\frac{\text{Volume Solids (\%) X 10}}{\text{Dry Film Thickness } (\mu)}$ (m^2/litre)
Practical Coverage (20% Loss Factor)	:	6.6 m^2/litre (for dry film thickness of 60 microns) 5.0 m^2/litre (for dry film thickness of 80 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.

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% 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/cm^2 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	:	9 parts by volume of **Nippon EA9 Red Oxide Primer (Base)** to 1 part by volume of **Nippon EA9 Red Oxide Primer (Hardener)**. 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.
Pot Life at 25°C to 30°C	:	6-7 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 ~ 30°C	:	Dry to touch	-	1-2 hours
	:	Dry to handle	-	4-5 hours
	:	Dry to overcoat	-	Minimum 16 hours
Curing Time at 25°C ~ 30°C	:	6-7 days		

Note: Drying time will become remarkably delayed under low temperature. Overcoating the previous coat of Nippon EA9 Red Oxide Primer should be done within 6 ~ 7 days but preferably as soon as possible after it has been allowed 16 hours drying. This is to ensure proper intercoat adhesion. If the previous coat of Nippon EA9 Red Oxide Primer has been left exposed for more than 6 ~ 7 days, it is desirable to roughen it by dry sanding with sandpaper before it is overcoated. 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	(4.5 litres Base and 0.5 litre Hardener)
		20 litres	(18 litres Base and 2 litres Hardener)
Shelf Life (at 25°C ~ 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. Protect from extremes of temperature & store in a cool place. 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:

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.