NIPPON PAINT HI-PON 80-03 EPOXY PHENOLIC PRIMER

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NIPPON PAINT HI-PON 80-03 EPOXY PHENOLIC PRIMER is a two-pack epoxy phenolic coating for blast cleaned steel surfaces. It has a wide range of chemical resistance properties making it a durable, a high performance coating for steelwork and concrete surface with immersion as well as non-immersion services. It is designed for long term corrosion protection lining of storage tank for a wide range of chemicals, solvents, crude oil, aggressive palm oil and vegetable oil derivatives.

Product Features:

- Outstanding resistance to aqueous solutions and a wide range of industrial chemicals
- Certified to BS 6920 for contact with portable water
- Tested in accordance with EI standard 1541, Section 2.2 and 3 for Aviation Fuel Storage Tanks and Piping
- Tested in accordance with Defence Standard 80-97 Issue 5 Annex B

Paint Type	Product Type	Finishing	Recommended Substrate	Pack Size
Solvent based	Interior	Matt Red Oxide	Steel and concrete	5 L (4.3L Base and 0.7L Hardener)

Composition

Pigment	: Inorganic pigments and extender
Binder	: Epoxy and phenylkamine
Thinner	: Combination of aromatic, ketone and alcohol

Technical Data

Drying Time (25-30°C)	: Touch Dry : 30 - 40 mins (Dependent on temperature and humidity) : Hard Dry : 4 - 5 hours (Dependent on temperature and humidity)
Overcoating Time (25-30°C)	: Minimum 8 hours (Dependent on temperature and humidity)
Curing Time (25-30°C)	: 6 - 7 days (Dependent on temperature and humidity).
Typical Thickness	: 100 - 200 μm dry film per coat 154 – 308 μm wet film per coat
No. of Coats	: 1 - 2 coats
Theoretical Coverage	: 6.50 m^2 per litre per coat (for dry film thickness of 100 microns) : 3.25 m^2 per litre per coat (for dry film thickness of 200 microns)
Practical Coverage (40% Loss Factor, as a guideline)	: 3.90 m^2/litre (for dry film thickness of 100 microns) 1.95 m^2/litre (for dry film thickness of 200 microns)
Volume Solid	: 65 ± 2% by volume
Specific Gravity	: 1.42 – 1.52 (for mixture of base and hardener)
Mixing Ratio	: 6 parts 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 contents of the Hardener component, continue stirring until a homogeneous mix is obtained.)*
Pot Life (25-30°C)	: 4 - 5 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 and compressed air spray generally lead to lower film thickness, so more applications may be required to obtain the recommended thickness per coat.

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. Brush and roller are recommended for small areas and touch-up only. Good quality brushes and

mohair/ short nap rollers should be used with full strokes. Avoid rebrushing. Additional coats may be required to achieve minimum specified film thickness.

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 will become remarkably delayed under low temperature. Overcoating the previous coat of Nippon Paint HI-PON 80-03 Epoxy Phenolic 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.

Thinner	: HI-PON EPOXY 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 : 150 -200 kg/cm^2
	: Tip size : 0.018" – 0.026"
	: Spray angle : 60° -70°
	: Dilution : Up to 5% thinner by volume

Recommended Coating System

Internal Tanks / Silo*

Primer	: Nippon Paint Hi-Pon 80-03 Epoxy Phenolic Primer	: 1 Coat
Intermediate	: Nippon Paint Hi-Pon 80-04 Epoxy Phenolic Topcoat	: 1 Coat
Top Coat	: Nippon Paint Hi-Pon 80-04 Epoxy Phenolic Topcoat	: 1 Coat

** Kindly seek assistance from a Nippon Paint representative for guidance on the appropriate cargo and service temperature of internal tanks/silo.*

Surface Preparation

STEEL, INTERNAL STORAGE/SILO

For optimum performance, abrasive blasting in accordance to **Sa 2½ ISO 8501-1:2007** 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. For internal storage/silo that are under immersion services, abrasive blasting must be conducted until in accordance to **Sa 2½ ISO 8501-1:2007**.

OTHER SURFACES

The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.

Cleaning

Cleaning Solvent : HI-PON EPOXY THINNER. Clean up equipment with thinner immediately after use.

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 good ventilation is necessary.

Safety Precautions

- Keep container tightly closed and keep out of reach children or away from food and drink.
- Ensure good ventilation during application and drying.
- When applying paint, it is advisable to wear eye protection.
- In case of contact with eye, rinse with plenty of water immediately and seek medical advice.
- Remove splashes from skin by using soap or water.
- Paint must always be stored in a cool place.
- When transporting paint, care must be taken. Always keep container in a secure upright position.
- Dispose any paint waste in accordance with the appropriate Environment Quality Regulations.

Note

* Theoretical Coverage is based on a mathematical formula and does not consider Loss Factor.

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

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.