

PRODUCT DESCRIPTION

Hi-Pon 80-02 Epoxy Novolac is a two-pack epoxy novolac coating for blast cleaned and primed steel surfaces. Its wide range of chemical resistance properties has made it a durable, high performance coating for steelwork and concrete surface with immersion as well as non-immersion services.

INTENDED USE

It is designed for long-term corrosion protection lining of storage tank for a wide range of chemicals, solvents & also suitable for crude oil up to 160 °C. It can also be used as a long-term corrosion protection lining of storage tank for selective palm oil derivatives & vegetable oil.

- FDA 21 CFR Part 175.300 compliance

GENERAL PROPERTIES

Colour	: Off-White & Grey
Gloss Level	: Low-Gloss
Volume Solid	: 70 ± 2 %
Specific Gravity	: 1.81 ± 0.05 kg/l (Mixed)
Flash Point	: Base: 23 °C Hardener: 96 °C Mix: 23 °C
VOC	: 268 g/L (EPA Method 24)
Typical Thickness	: 100 – 200 µm dry film 143 – 286 µm wet film

SURFACE PREPARATION

All surfaces should be clean dry, and free from contamination. The surface should be assessed and treated in accordance with ISO 8504. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning

For optimum performance, abrasive blast clean to Sa 2½ (ISO 8501-1) or SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

Shop Primed Surface

This product is suitable for application to the unweathered steelwork freshly coated with approved shop primers. Other types of shop primer are not suitable for over coating and will required complete removal by abrasive blast cleaning. Weld seams and damaged areas should be blast cleaned to Sa 2½ (ISO 8501-1) or SSPC-SP10, to achieve surface profile 50 – 75 µm.

Damaged Area

Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1) or SSPC-SP10. When abrasive blasting is not possible, mechanical

cleaning to St3 (ISO 8501-1) or SSPC-SP3 is acceptable. Hi-Pon 80-02 Epoxy Novolac should be applied over a surface that is dry and free from all contamination.

Other Surfaces

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10 °C and relative humidity is above 85 %. The temperature of steel surface must be minimum 3 °C above dew point of surrounding air. Ensure proper ventilation to have air movement to remove solvent.

APPLICATION GUIDE

Mixing Ratio	:	BASE	:	HARDENER	
		7.5	:	1	(by volume)
		Base and hardener should be mixed thoroughly before use with a mechanical agitator			
Pot Life	:	<u>25 °C</u>			
		2.5 hours			
Theoretical Coverage	:	7.0 m ² /litre at 100 µm DFT			
		3.5 m ² /litre at 200 µm DFT			
Thinner	:	Hi-Pon Epoxy Thinner			
Cleaner	:	Hi-Pon Epoxy Thinner			

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	:	Tip Size	:	0.018" – 0.026"
		Pressure at nozzle	:	150 – 200 bar
Drying Time	:	Substrate Temperature	<u>25 °C</u>	<u>40 °C</u>
		Surface Dry	2 hrs	1 hr
		Through Dry	6 hrs	4 hrs
		Cured	7 days	4 days
		Dry to Overcoat (min)	6 hrs	4 hrs
		Dry to Overcoat (max)	14 days	7 days

Remarks: Stripe coat is required on all weld lines. Pin-hole detection is required to ensure a pin hole-free system.

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

HEAT RESISTANCE**Dry, Atmospheric**

- Continuous : 160 °C
- Minimum : - 40 °C
- Intermittent : 200 °C

Wet, Immersed

- Fresh Water : 95 °C
- Crude Oil : 160 °C

Intermittent temperature duration – 1 hour maximum

The temperatures listed relate to retention of protective properties. Aesthetic properties may suffer at these temperatures. Heat resistance is influenced by the total coating system. If used as part of a system, ensure all coatings in the system have similar heat resistance.

**RECOMMENDED
COATING SYSTEM**

Hi-Pon 80-02 is normally applied directly to steel:

On Sa 2½, 2 coats x 150 µm dry film thickness

For the choice of coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation.

PACKAGING

Unit	<u>Base</u>		<u>Hardener</u>	
	Volume	Container Size	Volume	Container Size
20 L	17.65 L	20 L	2.35 L	5 L

STORAGE

Shelf Life Base : 12 months (25 °C)
 Hardener : 12 months (25 °C)

Subject to re-inspection thereafter. Higher temperature during storage may reduce the shelf life and may lead to gelling in the tin. Frequent temperature cycles may also shorten the shelf life.

Store in tightly closed container in a dry, cool and well-ventilated space, keep away from sources of heat and ignition.

SAFETY PRECAUTION

- This product is intended for use of professional applicators. Refer to the safety information display on the container and in the safety data sheet (SDS) before using the product.
- Use this product in well-ventilated area, avoid skin contact, spillage on the skin should immediately be removed with suitable cleanser, soap and water.
- Eye should be well flush with water and seek for medical attention immediately upon contact with this product.
- During the application, naked flame, welding operation and smoking is not allowed. Adequate ventilation should be provided.
- If you have any doubt regarding the suitability of use, refer to Nippon Paint for further advice.

DISCLAIMER

The information in this data sheet is given to the best of Nippon Paint's knowledge and practical experience. Users may consult with Nippon Paint on the general suitability of the product for their needs and specific application practices though it remains each user's responsibility to determine the suitability of the product for the user's particular use. The condition of the substrate and application are not within Nippon Paint's control. Therefore, no implied conditions, warranties or other terms will apply to the Product. Nippon Paint does not and cannot warrant the results which the user may obtain by using the product. In no event will Nippon Paint be liable to the user for any kind of loss (whether direct or indirect) even if Nippon Paint was previously advised of it. In line with Nippon Paint's policy for continuous development, Nippon Paint reserves the right to modify the product and the information in this data sheet without prior notice. It is the user's responsibility to check with Nippon Paint for the latest version of this data sheet. This data sheet has been translated into various languages. In the event of any inconsistency, the English version shall prevail.