

**PRODUCT DESCRIPTION**

**Hi-Pon 80-16 Epoxy SF** is a two-pack, solvent-free, high build epoxy tank lining for potable water. Suitable for properly prepared carbon steel and concrete.

**INTENDED USE**

It is designed for use as a self-priming high build finish for internal lining of potable water storage tank. It can also be used as a long-term corrosion protection lining of storage tank for crude oil, mineral oils and petroleum products. It can also be used for maintenance & repair.

- Certified to BS 6920 for contact with potable water

**GENERAL PROPERTIES**

<b>Colour</b>	: Off-White & Grey
<b>Gloss Level</b>	: Not applicable
<b>Volume Solid</b>	: 100 %
<b>Specific Gravity</b>	: 1.25 ± 0.05 kg/l (Mixed)
<b>Flash Point</b>	: Base: 78 °C Hardener: 62 °C Mix: 62 °C
<b>VOC</b>	: 17 g/L (EPA Method 24)
<b>Typical Thickness</b>	: 300 – 600 µm dry film 300 – 600 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 75 – 100 microns (3 – 4 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.

Concrete Substrates

New concrete shall be properly cured prior to coating application. All surfaces should be clean and free from laitance, curing compounds, release agents, efflorescence, grease, oil, dirt, organic growth, old coatings and loose or disintegrating concrete. Surface preparation should be done in accordance to SSPC-SP13 / NACE No. 6. A suitable primer or sealer is required prior to coating application.

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,

**TECHNICAL DATA SHEET**

mechanical cleaning to St3 (ISO 8501-1) or SSPC-SP3 is acceptable. Hi-Pon 80-16 Epoxy SF 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**  
2 : 1 (by volume)

Base and hardener should be mixed thoroughly before use with a mechanical agitator

**Pot Life** : 25 °C  
1 hour

**Theoretical Coverage** : 3.3 m<sup>2</sup>/litre at 300 µm DFT  
1.7 m<sup>2</sup>/litre at 600 µm DFT

**Thinner** : Do not thin

**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 : 0.021" – 0.026"  
Pressure at nozzle : > 210 bar

<b>Drying Time</b>	: Substrate Temperature	<u>25 °C</u>	<u>40 °C</u>
		Surface Dry	6 hrs
	Through Dry	15 hrs	6 hrs
	Cured	7 days	4 days
	Dry to Overcoat (min)	15 hrs	6 hrs
	Dry to Overcoat (max)	14 days	14 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 : 100 °C
- Minimum : - 40 °C
- Intermittent : 120 °C

**Wet, Immersed**

- Fresh Water : 60 °C
- Crude Oil : 60 °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 80-16 is normally applied directly to steel; however, it can also be applied over the following primers:

**Primer:**

- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-03 Epoxy White primer

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

**PACKAGING**

<u>Unit</u>	<u>Base</u>		<u>Hardener</u>	
	<b>Volume</b>	<b>Container Size</b>	<b>Volume</b>	<b>Container Size</b>
<b>15 L</b>	10 L	20 L	5 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.