



HI-PON 80-05 EPOXY TL 70

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Hi-Pon 80-05 Epoxy TL 70 is a two-pack epoxy tank lining for potable water.

INTENDED USE

It is designed 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 selective palm oil derivatives & vegetable oil with FDA 21 CFR Part 175.300 compliance and BS 6920 potable water at 60°C approval.

GENERAL PROPERTIES

Colour	: White & Grey
Gloss Level	: Semi-Gloss
Volume Solids, %	: 70 ± 2 %
Specific Gravity	: 1.77 kg/l (Mixed)
Flash point	: Base: 23 °C Hardener: 31 °C Mix: 23 °C
VOC	: 260 g/L (EPA Method 24)
Typical Thickness	: 100 – 150 µm dry film : 143 – 215 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.

Stripe coat is required on all weld lines.

Abrasive Blast Cleaning

Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). For optimum performance, blast cleaned to 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.

Damaged Area

Damage area should be prepared with abrasive blast cleaning to minimum Sa 2½ (ISO 8501-1:2007). After the surface preparation repair the damaged area using Hi-Pon 80-05.

Hi-Pon 80-05 Epoxy TL 70 should be applied over a surface that is dry and free from dirt, grease, oil and other contaminants and must be applied within the overcoating intervals specified (refer to application section for details).

Other Surfaces

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



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CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C and relative humidity is over 85%. The temperature of steel surface must be a 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 = 4.56 : 1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25 °C 1 hour
Theoretical Coverage	: 7.0 m ² /litre at 100 µm DFT 4.7 m ² /litre at 150 µm DFT
Thinner	: 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	: 140 – 170 kg/cm ²
Typical Thickness	: 100 – 150 µm dry film	
	: 143 – 215 µm wet film	
Drying Time	: Substrate Temperature	: 25°C 40°C
	Surface Dry	: 2 hrs 1 hr
	Through Dry	: 5 hrs 3 hrs
	Cured	: 7 days 4 days
	Dry to recoat (min)	: 5 hrs 3 hrs
	Dry to recoat (max)	: 2 mths 1 mths

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.



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RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 80-05 Epoxy TL 70:

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

Unit	Base		Hardener	
	Vol	Container Size	Vol	Container Size
20 L	16.4 L	20 L	3.6 L	5 L

STORAGE

Shelf life : Part A: 12 months (25°C)
Part B: 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



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