



HI-PON 80-11 VINYL ESTER CONCRETE PRIMER

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Hi-Pon 80-11 Vinyl Ester Concrete Primer is a three-pack, chemical resistant vinyl ester coating. It is designed to promote adhesion to properly prepared concrete substrates. Suitable for use as primer in atmospheric and immersed environments.

INTENDED USE

It is used as primer for polyester and vinyl ester coating systems. Designed for use in the internal lining of chemical storage tanks and pipes, and for structural steelwork in environments where superior resistance to chemical attack is required. Suitable for use in most aggressive environments.

GENERAL PROPERTIES

Colour	: Translucent Purple
Gloss Level	: Not applicable
Volume Solids, %	: 100 % Reactive (~ 70 % of contents are convertible to solid)
Specific Gravity	: 1.03 kg/l (Mixed)
Flash point	: Base: 33°C Hardener: 60°C Mix: 33°C
VOC	: 429 g/L (EPA Method 24)
Typical Thickness	: 50 – 100 µm dry film : 72 – 143 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.

Concrete

Abrasive blasting or scarification to remove laitance and surface contaminants is recommended. Concrete must be thoroughly cured and dry at time of application. It must be free of oils, curing solutions, dust and mold release agents. Use ASTM D 4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, re-test until dry.

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 80%.

The temperature of surface must be minimum 3°C above dew point of surrounding air. When surface temperatures exceed 35°C, Hi-Pon 80-11



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should be overcoated as soon as hard dry to avoid intercoat adhesion problems.

APPLICATION GUIDE

Mixing Ratio	: Base : Accelerator : Hardener = 100 : 0.4 : 1.8 (by weight)		
	Base and Accelerator should be mixed thoroughly before adding Hardener.		
Pot Life	: 25°C 30 minutes	: 35°C 20 minutes	(Pot life will vary substantially with temperature)
Theoretical Coverage	: 0.20 kg/m ² at 100 µm DFT		
Thinner	: Do not thin		
Cleaner	: Hi-Pon Vinyl Ester 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	: 0.019" – 0.025"	
	: Pressure at nozzle	: > 70 kg/cm ²	
Typical Thickness	: <u>Concrete</u>		
	: 50 – 100 µm dry film		
	: 72 – 143 µm wet film		
Drying Time	: Substrate Temperature	25 °C	35 °C
	: Surface Dry	1 hour	1 hour
	: Through Dry	6 hours	4 hours
	: Cured *	7 days	6 days
	: Dry to recoat (min)*	6 hours	4 hours
	: Dry to recoat (max)*	7 days	6 days

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 paint system is recommended for Hi-Pon 80-11 Vinyl Ester Concrete Primer:

Top Coat:

- Hi-Pon 80-09 Novolac Vinyl Ester GF
- Hi-Pon 80-12 Vinyl Ester Lining

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

PACKAGING

Base		Accelerator		Hardener	
Weight	Container Size	Weight	Container Size	Weight	Container Size
20 kg	20 L	0.08 kg	0.1 L	0.36 kg	0.5 L

STORAGE

Shelf life : Base : 6 months (25°C)
Accelerator : 6 months (25°C)
Hardener : 6 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. Recommended storage temperature range is 10°C - 15°C to prolong shelf life for Base only. Best practice would be to store them in separate locations.

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.
- The accelerator should never be mixed directly with a peroxide catalyst (such as MEKP, BPO, etc). Mixing would cause a violent reaction, and a fire or explosion could result.



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- 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.