



HI-PON 80-09 NOVOLAC VINYL ESTER GF

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Hi-Pon 80-09 Novolac Vinyl Ester GF is a three-pack, high abrasion and chemical resistant novolac vinyl ester coating, reinforced with glass flakes. Suitable for properly prepared carbon steel and concrete substrates in atmospheric and immersed environments.

INTENDED USE

It is 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. Excellent resistance in both aliphatic and aromatic organic solvents, and concentrated organic and inorganic acids.

GENERAL PROPERTIES

Colour	: Limited Colours
Gloss Level	: Semi Gloss
Volume Solids, %	: 100 % Reactive (~ 85 % of contents are convertible to solid)
Specific Gravity	: 1.28 kg/l (Mixed)
Flash point	: Base: 33°C Hardener: 70°C Mix: 33°C
VOC	: 42 g/L (EPA Method 24)
Typical Thickness	: 300 – 350 µm dry film : 353 – 412 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

Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to 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.

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%.



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The temperature of surface must be minimum 3°C above dew point of surrounding air. When surface temperatures exceed 35°C, Hi-Pon 80-09 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 35°C 55 minutes 35 minutes (Pot life will vary substantially with temperature)
Theoretical Coverage	: 0.55 kg/m ² at 350 µm DFT
Thinner	: Do not thin
Cleaner	: Hi-Pon Vinyl Ester Thinner

APPLICATION METHOD

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

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.036" – 0.048"
	Pressure at nozzle	: > 220 kg/cm ²
Typical Thickness	: 300 – 350 µm dry film	
	: 353 – 412 µm wet film	
Drying Time	: Substrate Temperature	25 °C 35 °C
	Surface Dry	2 hours 1.5 hours
	Through Dry	5 hours 3 hours
	Cured *	3 days 3 days
	Dry to recoat (min)*	5 hours 3 hours
	Dry to recoat (max)*	3 days 3 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 80-09 Novolac Vinyl Ester GF:

Hi-Pon 80-09 is normally applied directly to steel, however, it can also be applied over the following primers.

Primer:

- Hi-Pon 80-10 Vinyl Ester Steel Primer
- Hi-Pon 80-11 Vinyl Ester Concrete Primer

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 : 4 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.



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- 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.
- 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.