



# HI-PON 90-07 EPOXY GLASS FLAKE HB

TECHNICAL DATA SHEET

## PRODUCT DESCRIPTION

**Hi-Pon 90-07 Epoxy Glass Flake HB** is a two-pack, high build, high solids epoxy coating, reinforced with high level of chemically resistant glass flakes. It has excellent corrosion, impact and abrasion resistance.

## INTENDED USE

It is designed for use in highly corrosive environments where high mechanical strength is required, such as areas in the splash or tidal zones. Suitable for properly prepared carbon steel substrates in both atmospheric and immersed environments. Recommended for offshore environments, refineries, power plants, bridges, mining equipments and general structural steels. Compatible with cathodic protection systems.

## GENERAL PROPERTIES

<b>Colour</b>	: Black
<b>Gloss Level</b>	: Not Applicable
<b>Volume Solids, %</b>	: 93 ± 2 %
<b>Specific Gravity</b>	: 1.41 kg/l (Mixed)
<b>Flash point</b>	: Base: 23°C Hardener: 23°C Mix: 23°C
<b>VOC</b>	: 72 g/L (EPA Method 24)
<b>Typical Thickness</b>	: 500 – 1000 µm dry film : 537 – 1075 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 85%. The temperature of steel surface must be minimum 3°C above dew point of surrounding air.



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## APPLICATION GUIDE

<b>Mixing Ratio</b>	: Base : Hardener = 3.5 : 1 (by volume) Base and hardener should be mixed thorough before use.
<b>Pot Life</b>	: 25°C 55 minutes
<b>Theoretical Coverage</b>	: 1.86 m <sup>2</sup> /litre at 500 µm DFT 0.93 m <sup>2</sup> /litre at 1000 µm DFT
<b>Thinner</b>	: 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

<b>Airless Spray</b>	: Tip Size	: 0.036" – 0.045"
	: Pressure at nozzle	: > 215 kg/cm <sup>2</sup>

**Filters should be removed from spray equipment prior to spraying because of glass flake**

<b>Typical Thickness</b>	: 500 – 1000 µm dry film
	: 537 – 1075 µm wet film

<b>Drying Time</b>	: Substrate Temperature	25 °C	40 °C
	Surface Dry	4.5 hrs	2 hrs
	Through Dry	10 hrs	5 hrs
	Cured *	7 days	4 days
	Dry to recoat (min)*	10 hrs	5 hrs
	Dry to recoat (max)*	7 days	4 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.

## RECOMMENDED PAINTING SYSTEM

The following coating system is recommended for Hi-Pon 90-07 Epoxy Glass Flake HB:



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Hi-Pon 90-07 is normally applied directly to steel; however, it can also be applied over the following primers.

### Shop Primer:

- Zinky-10 Inorganic Zinc Shop Primer

### Primer:

- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-04 STE IM 80

### Topcoat:

- Hi-Pon 40-02 Epoxy Top Coat
- Hi-Pon 40-04 Epoxy Top Coat
- Hi-Pon 50-01 Polyurethane Top Coat
- Hi-Pon 50-03 Polyurethane Top Coat

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
18 L	14 L	20 L	4 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 by 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.



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- 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

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