



# HI-PON 90-01 EPOXY GLASS FLAKE HB 95

TECHNICAL DATA SHEET

## PRODUCT DESCRIPTION

Hi-Pon 90-01 Epoxy Glass Flake HB 95 is a two-pack, low VOC, high solids, high build epoxy coating, reinforced with glass flakes. It provides excellent corrosion protection and has good abrasion resistance. Suitable for seawater immersion.

## INTENDED USE

It is designed for use in highly corrosive environments, such as offshore structures, refineries, power plants, bridges, chemical plants, tanks external and for structural steelwork in atmospheric and immersed environments.

Approved to BS 6920-1 for contact with potable water.

## GENERAL PROPERTIES

<b>Colour</b>	: Grey & White
<b>Gloss Level</b>	: Gloss
<b>Volume Solids, %</b>	: 95 ± 3 %
<b>Specific Gravity</b>	: 1.35 – 1.39 kg/l (Mixed)
<b>Flash point</b>	: Base: 13.3°C Hardener: 93°C Mix: 13.3°C
<b>VOC</b>	: 42 g/L (EPA Method 24)
<b>Typical Thickness</b>	: 300 – 625 µm dry film : 316 – 658 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 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.

### 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 or relative humidity is over 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air.



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## APPLICATION GUIDE

<b>Mixing Ratio</b>	: Base : Hardener = 2 : 1 (by volume) Base and hardener should be mixed thoroughly before use.
<b>Pot Life</b>	: 25°C 50 minutes
<b>Theoretical Coverage</b>	: 3.1 m <sup>2</sup> /litre at 300 µm DFT 1.5 m <sup>2</sup> /litre at 625 µm DFT
<b>Thinner</b>	: Normally not recommended

## 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	: 0.021" – 0.035"
	: Pressure at nozzle	: > 200 kg/cm <sup>2</sup>

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

<b>Typical Thickness</b>	: 300 – 625 µm dry film
	: 316 – 658 µm wet film

<b>Drying Time</b>	: Substrate Temperature	: 25 °C	40 °C
	Surface Dry	: 4.5 hrs	2 hrs
	Through Dry	: 10 hrs	4 hrs
	Cured	: 7 days	3 days
	Dry to recoat (min)	: 10 hrs	4 hrs
	Dry to recoat (max)	: 7 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.

## RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 90-01 Epoxy Glass Flake HB 95:

Hi-Pon 90-01 is normally applied directly to steel; however, it can also be applied over the following primers.



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## Shop Primer:

- Zinky-10 Inorganic Zinc Shop Primer

## Primer:

- Zinky-13 Inorganic Zinc Rich Primer 85 (mist coat is required)
- Zinky-22 Epoxy Zinc Rich Primer 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63

## Intermediate/Topcoat:

- Hi-Pon 90-01 Epoxy Glass Flake HB 95
- 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
15 L	10 L	20 L	5 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.



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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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