



# HI-PON 20-05 EPOXY ST PRIMER

TECHNICAL DATA SHEET

## PRODUCT DESCRIPTION

Hi-Pon 20-05 Epoxy ST Primer is a two component, high build, modified epoxy based surface tolerant paint, and providing good corrosion properties on steel substrate with only St2 surface preparation, high-building can reach 160µm per layer.

## INTENDED USE

Suitable for steelworks without abrasive blasting or low surface preparation requirement; or as sealing primer for concrete.

## GENERAL PROPERTIES

|                          |  |
|--------------------------|--|
| <b>Colour</b>            | : Grey or Light Red                                |
| <b>Gloss Level</b>       | : Matt   |
| <b>Volume Solids, %</b>  | : 80 ± 2 %   |
| <b>Specific Gravity</b>  | : 1.52 kg/l (Mixed)                                |
| <b>Flash point</b>       | : Base: 29°C Hardener: >100°C Mix: 30.5°C          |
| <b>VOC</b>               | : 190 g/L (mix, by calculation)                    |
| <b>Typical Thickness</b> | : 100 – 250 µm dry film<br>: 110 – 280 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 St2 above. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

### Hand or power tool clean

Abrasive blast cleaning to ISO St2 (ISO 8501-1:2007). If oxidation has occurred between the handling and application of this product, the surface should be re-handled 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 by mechanical cleaning to St 2 (ISO 8501-1:2007). After the surface preparation, the application of HI-PON 20-05 can be performed.

Hi-Pon 20-05 should be applied over a surface that is dry and free from all contamination 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 above 45°C and relative humidity is over 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air.

## APPLICATION GUIDE

|                             |  |
|-----------------------------|--|
| <b>Mixing Ratio</b>         | : Base: Hardener = 8:1 (by weight)                       |
|                             | Base and hardener should be mixed thoroughly before use. |
| <b>Pot Life</b>             | : 25°C<br>2.5Hrs   |
| <b>Theoretical Coverage</b> | : 5.0 m <sup>2</sup> / litre at 160µm DFT                |
| <b>Thinner</b>              | : 0941 thinner   |

## APPLICATION METHOD

Brush and roll is suitable for stripe coating and very small areas. For best result, use airless spray. Care must be taken to achieve the specified dry film thickness.

## APPLICATION DETAILS

|                          |                         |                                |
|--------------------------|-------------------------|--------------------------------|
| <b>Airless Spray</b>     | : Tip Size              | : 0.017" – 0.031"              |
|                          | Pressure at nozzle      | : 140 – 170 kg/cm <sup>2</sup> |
| <b>Typical Thickness</b> | : 100 – 250 µm dry film |                                |
|                          | : 110 – 280 µm wet film |                                |
| <b>Drying Time</b>       | : Substrate Temperature | : 25°C      40°C               |
|                          | Surface Dry             | : 3hr      2hrs                |
|                          | Through Dry             | : 8hrs      6hrs               |
|                          | Cured                   | : 7days      3days             |
|                          | Dry to recoat (min)     | : 8hrs      6hrs               |
|                          | Dry to recoat (max)     | : 7days      3days             |

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 Intermediate/Topcoats are recommended for Hi-Pon 20-05:

### Intermediate

- Hi-Pon 30-02 Epoxy MIO 80 W
- Hi-Pon 30-02 Epoxy MIO 80 S
- Hi-Pon 30-03 Epoxy Midcoat W
- Hi-Pon 30-03 Epoxy Midcoat S

### Topcoat

- Hi-Pon 40-01 Epoxy Top Coat
- Hi-Pon 50-02 Polyurethane Top Coat
- Hi-Pon 50-01 Polyurethane Top Coat
- Hi-Floro 6738 Florocarbon 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 |                |
|--------|--------|----------------|----------|----------------|
|        | weight | Container Size | weight   | Container Size |
| 22.5kg | 20kg   | 20L            | 2.5kg    | 4L             |

## 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.

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.



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TECHNICAL DATA SHEET

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