

**PRODUCT DESCRIPTION**

Hi-Pon 20-09 Epoxy Shop Primer FD is a two-pack, fast drying amide-cured epoxy prefabrication primer.

**INTENDED USE**

It is designed for use as a pre-construction primer on blast cleaned steel surfaces in automatic shop-priming plants to protect steel during transportation, storage and production.

Suitable as a holding primer for corrosion classes, ISO 12944.

**GENERAL PROPERTIES**

|                          |   |
|--------------------------|---|
| <b>Colour</b>            | : Reddish Brown                               |
| <b>Gloss Level</b>       | : Matt  |
| <b>Volume Solid</b>      | : 30 ± 2 %                                    |
| <b>Specific Gravity</b>  | : 1.30 ± 0.05 kg/l (Mixed)                    |
| <b>Flash Point</b>       | : Base: -3 °C    Hardener: 7 °C    Mix: -3 °C |
| <b>VOC</b>               | : 585 g/L (EPA Method 24)                     |
| <b>Typical Thickness</b> | : 25 – 35 µm dry film<br>83 – 117 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**

For optimum performance, abrasive blast clean to Sa 2½ (ISO 8501-1) or 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 and relative humidity is above 85 %. The temperature of steel surface must be minimum 3 °C above dew point of surrounding air.

**APPLICATION GUIDE**

|                     |   |             |   |                 |             |
|---------------------|---|-------------|---|-----------------|-------------|
| <b>Mixing Ratio</b> | : | <b>BASE</b> | : | <b>HARDENER</b> |             |
|                     |   | 18          | : | 0.4             | (by volume) |

**TECHNICAL DATA SHEET**

Base and hardener should be mixed thoroughly before use with a mechanical agitator

|                             |   |
|-----------------------------|---|
| <b>Induction Time</b>       | : 15 mins   |
| <b>Pot Life</b>             | : <u>25 °C</u><br>24 hours  |
| <b>Theoretical Coverage</b> | : 12.0 m <sup>2</sup> /litre at 25 µm DFT<br>8.6 m <sup>2</sup> /litre at 35 µm DFT |
| <b>Thinner</b>              | : Hi-Pon Epoxy Thinner  |
| <b>Cleaner</b>              | : Hi-Pon Epoxy Thinner  |

**APPLICATION METHOD**

Conventional air or airless spray are 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              | : 0.015" – 0.021" |              |
|                      | Pressure at nozzle    | : 100 – 150 bar   |              |
| <b>Drying Time</b>   | Substrate Temperature | <u>25 °C</u>      | <u>40 °C</u> |
|                      | Surface Dry           | 2 mins            | 30 sec       |
|                      | Through Dry           | 8 mins            | 4 mins       |
|                      | Cured                 | 7 days            | 3 days       |
|                      | Dry to Overcoat (min) | 6 hrs             | 4 hrs        |
|                      | Dry to Overcoat (max) | Extended          |              |

**Remarks:** Where an "extended" overcoating time is stated, consult Nippon Paint Protective Coatings for recommended surface preparation to achieve optimal intercoat adhesion.

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  
COATING SYSTEM**

The following coating systems are recommended for Hi-Pon 20-09 Epoxy Shop Primer FD:

**Intermediate:**

- Hi-Pon 20-04 STE 80
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63

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

**Top Coat:**

- Hi-Alkyd 1501 Alkyd Top Coat
- Hi-Acyl 1901 Acrylic Top Coat
- Hi-Pon 40-04 Epoxy Top Coat
- Hi-Pon 50-01 AS 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**

| <u>Unit</u>   | <u>Base</u>   |                       | <u>Hardener</u> |                       |
|---------------|---------------|-----------------------|-----------------|-----------------------|
|               | <u>Volume</u> | <u>Container Size</u> | <u>Volume</u>   | <u>Container Size</u> |
| <b>18.4 L</b> | 18 L          | 20 L                  | 0.4 L           | 1 L                   |

**STORAGE**

**Shelf Life**      Base : 12 months (25 °C)  
                         Hardener : 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.
- 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**

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

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