



HI-PON 30-03 EPOXY MIDCOAT 80

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Hi-Pon 30-03 Epoxy Midcoat 80 is a two-pack, high solids, fast dry epoxy coating. It provides a high build barrier coating that gives excellent adhesion, surface wetting properties and anti-corrosive properties.

INTENDED USE

As a middle coat for bridges, tanks external and other steel structures used in severe corrosive environments, or pipelines, equipments, machinery and steel structures in chemical factory and power plant.

GENERAL PROPERTIES

| | |
|--------------------------|---|
| Colour | : White & Grey |
| Gloss Level | : Matt |
| Volume Solids, % | : 80 ± 2 % |
| Specific Gravity | : 1.70 – 1.80 kg/l (Mixed) depending on colours |
| Flash point | : Base: 23°C Hardener: 23°C Mix: 23°C |
| VOC | : 208 g/L (EPA Method 24) |
| Typical Thickness | : 80 – 200 µm dry film : 100 – 250 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.

Damaged Area

Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). When abrasive blasting is not possible, mechanical cleaning to St 3 (ISO 8501-1:2007) is acceptable. After the surface preparation, patch primer prior to the application of Hi-Pon 30-03 Epoxy Midcoat 80.

Hi-Pon 30-03 Epoxy Midcoat 80 should always be applied over a recommended anti-corrosive coating scheme for metal surface. The primer surface should be dry and free from oil and other contaminations. It 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.

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C or relative humidity exceeds 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air.



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APPLICATION GUIDE

| | |
|-----------------------------|---|
| Mixing Ratio | : Base : Hardener = 3 : 1 (by volume) Base and hardener should be mixed thoroughly before use. |
| Pot Life | : 25°C 1.5 hours |
| Theoretical Coverage | : 10.0 m ² /litre at 80 µm DFT 4.0 m ² /litre at 200 µm DFT |
| Thinner | : 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

| | | | |
|--------------------------|-------------------------|--------------------------------|---------|
| Airless Spray | : Tip Size | : 0.017" – 0.031" | |
| | : Pressure at nozzle | : 180 – 200 kg/cm ² | |
| Typical Thickness | : 80 – 200 µm dry film | | |
| | : 100 – 250 µm wet film | | |
| Drying Time | Substrate Temperature | : 25°C | 40°C |
| | Surface Dry | : 1.5 hrs | 0.5 hrs |
| | Through Dry | : 3.5 hrs | 1 hrs |
| | Cured | : 7 days | 3 days |
| | Dry to recoat (min) | : 3.5 hrs | 1 hrs |
| | Dry to recoat (max)* | : Extended | |

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.

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

RECOMMENDED PAINTING SYSTEM

The following coatings systems are recommended for Hi-Pon 30-03 Epoxy Midcoat 80:

Primer

- Zinky-12 Inorganic Zinc Rich Primer 77



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- Zinky-13 Inorganic Zinc Rich Primer 85
- Zinky-21 Epoxy Zinc Rich Primer 77
- Zinky-22 Epoxy Zinc Rich Primer 80
- Hi-Pon 20-01 Epoxy Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-07 Epoxy Zinc Phosphate 70
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63

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
- Hi-Floro 6738 Fluorocarbon 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 |
| 17 L | 12.7 L | 20 L | 4.3 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

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.