

PRODUCT DESCRIPTION

Hi-Pon 40-04 Epoxy Top Coat is a two-pack amine-adduct cured epoxy finish for use on steel and cement surfaces where chemical, oil and abrasion resistant coating is required. It is recommended for non-immersion services. If it is to be applied over steel, it has to be used in combination with the appropriate primers as recommended below. If it is to be applied over concrete, the surface should be acid-treated prior to application. Hi-Pon 40-04 Epoxy Top Coat is also available in non-skid quality.

INTENDED USE

Hi-Pon 40-04 Epoxy Top Coat is used as an interior top coat for pipelines, equipment, machinery and other steel structures in chemical factory, power plant and etc.

GENERAL PROPERTIES

Colour : Standard colours as per colour cards.

Special colours available upon request

Gloss Level : High-gloss Volume Solids, % : 51 ± 3 %

Specific Gravity : 1.00-1.30 kg/l (Mixed) depending on colours **Flash point** : Base: 27°C Hardener: 8°C Mix: 8°C

VOC : 535 g/L (mix, by calculation)

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 $2\frac{1}{2}$ (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 40-04.

Hi-Pon 40-04 should always be applied over a recommended anti-corrosive coating scheme for metal surface. The primer surface should be dry and free from all contamination and Hi-Pon 40-04 must be applied within the overcoating intervals specified (refer to relevant product data sheet).

Other Surfaces

The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.

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APPLICATION GUIDE

Mixing Ratio : Base: hardener = 4:1 (by volume)

Base and hardener should be mixed

thoroughly before use.

Pot Life : 25°C

6 - 8 Hrs

Theoretical Coverage : 10.2 m²/litre at 50µm DFT

Thinner : Hi-Pon Epoxy Thinner

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°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 METHOD

Brush, roller and airless spray is suitable for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.015" – 0.017"

Pressure at nozzle : 140 – 170 kg/cm2

Spray Angle : 60 - 70°

Typical Thickness : 50 - 100µm dry film

: 80 - 130ym wet film

Drying Time : Substrate Temperature : 25°C 40°C

Surface Dry : 1.5hrs 0.5hrs
Through Dry : 7hrs 3hrs
Cured : 7days 3days
Dry to recoat (min) : 7hrs 3hrs

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 Intermediate/Topcoats are recommended for Hi-Pon 40-04:

Primer

- Hi-Pon 20-02 Epoxy ZN Phosphate 90
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Zinky-11 Inorganic ZN Rich Primer
- Zinky-21 Epoxy ZN Rich Primer 70
- Zinky-23 Epoxy ZN Rich Primer 90
- Zinky-25 Epoxy ZN Rich Primer

Intermediate

- Hi-Pon 30-06 Epoxy Midcoat 90
- Hi-Pon 30-07 Epoxy MIO 90
- Hi-Pon 30-04 Epoxy MIO 70

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
5L	4L	5L	1L	1L
20L	6L	20L	4L	5L

STORAGE

Shelf life: Part A: 6 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.

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If you have any doubt regarding the suitability of use, refer to Nippon Paint for further advice.

Disclaimer: The above information is given to the best of our knowledge based on laboratory tests and practical experience. Nevertheless, we cannot assume any responsibility for the use of it since circumstances under which the products are applied in practice are subjected to many variations. You should request a copy of this document and review it carefully. It is the user's responsibility to check with Nippon Paint that this data sheet is current prior to using the product.

We reserve the right to alter the given data without prior notice.

If there is any inconsistency in the text the English version will prevail.

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