



HI-DRO 63-01 UNIVERSAL EPOXY

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Hi-Dro 63-01 Universal Epoxy is a two-pack, high performance, low VOC water-based epoxy coating. It has excellent adhesion and good corrosion resistance. Suitable for use as a direct-to-metal primer or as an intermediate.

INTENDED USE

It is designed for both new construction and general maintenance use in moderate industrial environments for the corrosion protection of equipment and other steel surfaces. Can be used as primer, mid coat, finish coat or as a single coat in atmospheric environments. Recommended for commercial infrastructure, refineries, power plants, warehouses and general structural steels.

GENERAL PROPERTIES

Colour	: White and Limited colours
Gloss Level	: Gloss
Volume Solids, %	: 50 ± 2 %
Specific Gravity	: 1.45 kg/l (Mixed)
Flash point	: Base: >100°C Hardener: >100°C Mix: >100°C
VOC	: 20 g/L (EPA Method 24)
Typical Thickness	: 75 – 125 µm dry film : 150 – 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.

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 and relative humidity is above 80%. The temperature of steel surface must be minimum 3°C above dew point of surrounding air.



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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 3 hours
Theoretical Coverage	: 4.00 m ² /litre at 125 µm DFT
Thinner	: Clean portable water

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	: 0.015" – 0.021"	
	: Pressure at nozzle	: > 170 kg/cm ²	
Typical Thickness	: 75 – 125 µm dry film : 150 – 250 µm wet film		
Drying Time	: Substrate Temperature	25 °C	40 °C
	Surface Dry	1 hrs	45 mins
	Through Dry	7 hrs	3 hrs
	Cured	7 days	5 days
	Dry to recoat (min)	7 hrs	3 hrs
	Dry to recoat (max)	7 days	5 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-Dro 63-01 Universal Epoxy:

Hi-Dro 63-01 is normally applied directly to steel; however, it can also be applied over the following primers.

Primer:

- Hi-Pon 20-10 Epoxy Zinc Phosphate 63
- Zinky-22 Epoxy Zinc Rich Primer 80



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Topcoat:

- Hi-Dro 60-01 Acrylic Sheen Top Coat
- Hi-Dro 60-02 Acrylic Gloss Top Coat
- Hi-Pon 40-04 Epoxy Top Coat
- Hi-Pon 50-01 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
20 L	16 L	20 L	4 L	5 L

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. 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 by 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 responsibility to determine the suitability of the product for the user's particular use. The condition of the substrate and application are not



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