HI-PON 200 CUI

EPOXY PHENOLIC

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Hi-Pon 200 CUI Epoxy Phenolic is a two-pack self-priming epoxy phenolic coating with excellent corrosion resistance when used to protect steelwork under thermal insulation in areas subjected to wet and dry cycling. It also offers good chemical resistance.

INTENDED USE

It is specially designed for use as an external coating for protection of steelwork from corrosion under thermal insulation (CUI). It is also suitable to protect insulated & uninsulated pipework and process vessels operating at temperatures up to 200 °C.

GENERAL PROPERTIES

Colour	: Off-White & Grey
Gloss Level	: Matt
Volume Solid	: 64 ± 2 %
Specific Gravity	: 1.46 ± 0.05 kg/l (Mixed)
Flash Point	: Base: 13.3 °C Hardener: 35 °C Mix: 13.3 °C
VOC	: 342 g/L (EPA Method 24)
Typical Thickness	: 100 – 150 µm dry film 156 – 234 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.

Damaged Area

Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1) or SSPC-SP10. When abrasive blasting is not possible, mechanical cleaning to St3 (ISO 8501-1) or SSPC-SP3 is acceptable. Hi-Pon 200 CUI should be applied over a surface that is dry and free from all contamination.

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. Ensure proper ventilation to have air movement to remove solvent.

APPLICATION GUIDE

Mixing Ratio : **BASE : HARDENER**
5.9 : 1 (by volume)

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

Pot Life : 25 °C
4 hours

Theoretical Coverage : 6.4 m^2/litre at 100 µm DFT
4.3 m^2/litre at 150 µm DFT

Thinner : Hi-Pon Epoxy Thinner

Cleaner : 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 : 0.018" – 0.026"
Pressure at nozzle : 150 – 200 bar

Drying Time

: Substrate Temperature	25 °C	40 °C
Surface Dry	1 hr	30 mins
Through Dry	6 hrs	4 hrs
Cured	10 days	7 days
Dry to Overcoat (min)	6 hrs	4 hrs
Dry to Overcoat (max)	21 days	14 days

Hi-Pon 200 CUI Epoxy Phenolic can be applied to hot substrates with surface temperatures up to 150 °C with a maximum of 125 µm dry film thickness.

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.

HEAT RESISTANCE

Dry, Atmospheric

- Continuous : 205 °C
- Minimum : - 40 °C
- Intermittent : 230 °C

Intermittent temperature duration – 1 hour maximum

The temperatures listed relate to retention of protective properties. Aesthetic properties may suffer at these temperatures. Heat resistance is influenced by the total coating system. If used as part of a system, ensure all coatings in the system have similar heat resistance.

RECOMMENDED COATING SYSTEM

Hi-Pon 200 CUI is normally applied directly to steel:

On Sa 2½, 2 coats x 100 µm dry film thickness

Total thickness must not exceed 250 µm.

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	
	Volume	Container Size	Volume	Container Size
5 L	4.28 L	5 L	0.72 L	1 L
20 L	17.1 L	20 L	2.9 L	5 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