

TECHNICAL DATA SHEETS



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HI-PON 20-09 EPOXY SHOP PRIMER FD

PRODUCT DESCRIPTION	Hi-Pon 20-09 Epoxy Shop Primer FD is a two-pack, fast drying amide-cured epoxy prefabrication primer.			
INTENDED USE	As a pre-construction primer on blast cleaned steel surfaces in automatic shop- priming plants to protect steel during transportation, storage and production. Provides corrosion protection up to 5 months at 25 to 35 microns (Depending on the types of exposure conditions and blasting profile). Suitable as a holding primer for corrosion classes, ISO 12944.			
GENERAL PROPERTIES	Colour : Reddish Brown Gloss Level : Matt Volume Solids, % : 30 ± 2% Specific Gravity : 1.23 - 1.33 kg/l (Mixed) Flash Point : Base: -3°C Hardener: 7°C Mix: -3°C VOC : 585 g/L (EPA Method 24) Hardener: 7°C Mix: -3°C Typical Thickness : 25 - 35 µm dry film 33 - 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 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. <u>Other Surfaces</u> 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 Steel surface temperature must be minimum 3°C above dew point of the surrounding air.			

Protective Coatings

Protective Coatings

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APPLICATION

APPLICATION

APPLICATION

RECOMMENDED

PAINTING SYSTEM

4

METHOD

DETAILS

GUIDE

Mixing Ratio

Pot Life

Theoretical

Airless Spray

Drying Time

adhesion.

Primer FD:

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Topcoat

Intermediate

Hi-Pon 20-04 STE 80 Hi-Pon 20-04 STE IM 80

Hi-Pon 30-02 Epoxy MIO 80

Hi-Pon 40-02 Epoxy Top Coat

Hi-Pon 30-03 Epoxy Midcoat 80

Typical Thickness

the specified dry film thickness.

Coverage

Thinner

HI-PON 20-09 EPOXY SHOP PRIMER FD

Base and hardener should be mixed thoroughly before use.

: 0.015" - 0.021"

: 25°C

: 2 mins

: 8 mins

: 7 days

: 6 hrs

: Extended

: 100 - 150 kg/cm²

40°C

30 sec

4 mins

3 days

4 hrs

: Base:Hardener = 18:0.4 (by volume)

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

: 12.0 m²/litre at 25 µm DFT

8.6 m²/litre at 35 μm DFTHi-Pon Epoxy Thinner

: 25°C 24 hrs

: Tip Size

Pressure at Nozzle

: 25 – 30 µm dry film

Surface Dry

Through Dry

Cured

parameters and special conditions could be included.

Hi-Pon 20-10 Epoxy Zinc Phosphate 63

83 – 117 μm wet film : Substrate Temperature

Dry to Recoat (min)

Dry to Recoat (max)*

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

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

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



HI-PON 20-09 EPOXY SHOP PRIMER FD

RECOMMENDED PAINTING SYSTEM	 Hi-Pon 40-04 Epoxy Top Coat Hi-Pon 50-01 Polyurethane Top Coat Hi-Pon 50-03 Polyurethane Top Coat For the choice of coating system for different application, refer to the brochure or contact Nippon Paint for professional recommendation.					
PACKAGING	Unit		Base	Hardener		
		Vol Container Size		Vol	Container Size	
	18.4L	18L	20L	0.4L	1L	
STORAGE	the shelf life also shorten t Store in tightl	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	 Informati using the Use this should in Eye shou upon cor During the 	om sources of heat and ignition. This product is intended for use of professional applicators. Refer to the information display on the container and in the safety data sheet (SDS) i using the product. Use this product in well-ventilated area, avoid skin contact, spillage on th should immediately be removed with suitable cleanser, soap and water. Eye should be well flushed with water and seek medical attention immed upon contact with this product. During the application, naked flame, welding operation and smoking allowed. Adequate ventilation should be provided. If you have any doubt regarding the suitability of use, refer to Nippon Pa 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.



HI-PON 20-09 EPOXY SHOP PRIMER FD AUTOBLAST

PRODUCT DESCRIPTION	Hi-Pon 20-09 Epoxy Shop Primer FD Autoblast is a two-pack, fast drying amide- cured epoxy prefabrication primer.				
INTENDED USE		ction primer on blast cleaned steel surfaces in automatic s to protect steel during transportation, storage and production.			
		protection up to 5 months at 25 to 35 microns (Depending on the conditions and blasting profile).			
	Suitable as a holding	ng primer for corrosion classes, ISO 12944.			
GENERAL	Colour	: Reddish Brown			
PROPERTIES	Gloss Level	: Matt			
	Volume Solids, %	: 30 ± 2%			
	Specific Gravity	: 1.23 – 1.33 kg/l (Mixed)			
	Flash Point	: Base: -3°C Hardener: 7°C Mix: -3°C			
	VOC	: 585 g/L (EPA Method 24)			
	Typical Thickness	: 25 – 35 µm dry film			
		83 – 117 μm wet film			
SURFACE PREPARATION	be assessed and the removed in accordant Abrasive Blast Clear Abrasive blast clear performance, blast c (2 - 3 mils). If oxidar product, the surface defect revealed by the the appropriate mant <u>Other Surfaces</u> The coating may be	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. <u>Abrasive Blast Cleaning</u> Abrasive blast cleaning to Sa $2\frac{1}{2}$ (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. <u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.			
CONDITION DURING APPLICATION		tion when the temperature is below 10°C and relative humidity emperature of steel surface must be a minimum 3°C above dew g air.			



NIPPON PAINT

Mixing Ratio	: Base:Hardener = 18:0.4 (by volume)			
	Base and hardener should be mixed thoroughly befo			
Induction time	: 15 mins			
Pot Life	: 25°C 24 hrs			
Theoretical Coverage	: 12.0 m²/litre at 25 μm DFT 8.6 m²/litre at 35 μm DFT			
Thinner	: Hi-Pon Epoxy Thinner			
are recommended for	r stripe coating and small area			
Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.021" : 100 – 150 kg/cm²		
Typical Thickness	: 25 – 35 μm dry film 83 – 117 μm wet film			
Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to recoat (max)*	: 25°C : 2 mins : 6 mins : 7 days : 6 hrs : Extended	40°C 30 sec 3 mins 3 days 4 hrs	
before recoating may humidity, underlying strength etc. A com parameters and spece *Where an "extender	y be shorter or longer, depend paint system, requirement for plete system can be describ cial conditions could be includ d" overcoating time is stated,	ling on film thick or early handling ed on a system ded. , consult Nippor	and mechanica sheet, where al Paint Protective	
Primer FD Autoblast Intermediate • Hi-Pon 20-04 S • Hi-Pon 20-04 S	4 STE 80 4 STE IM 80			
	Induction time Pot Life Theoretical Coverage Thinner Conventional air or a are recommended fo the specified dry film Airless Spray Typical Thickness Drying Time The given data must before recoating may humidity, underlying strength etc. A com parameters and spec "Where an "extende Coatings for record adhesion. The following coatin Primer FD Autoblast Intermediate • Hi-Pon 20-04 S	Base and hardener should Induction time : 15 mins Pot Life : 25°C 24 hrs Theoretical : 12.0 m²/litre at 25 µm DFT Coverage 8.6 m²/litre at 35 µm DFT Thinner : Hi-Pon Epoxy Thinner Conventional air or airless spray are recommended are recommended for stripe coating and small area the specified dry film thickness. Airless Spray : Tip Size Pressure at Nozzle Typical Thickness : 25 – 35 µm dry film 83 – 117 µm wet film Drying Time : Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to recoat (max)* The given data must be considered as guidelines of before recoating may be shorter or longer, depend humidity, underlying paint system, requirement for strength etc. A complete system can be describ parameters and special conditions could be include "Where an "extended" overcoating time is stated, Coatings for recommended surface preparation adhesion. The following coatings systems are recommended Primer FD Autoblast: Intermediate • Hi-Pon 20-04 STE 80 • Hi-Pon 20-04 STE 1M 80	Base and hardener should be mixed thoro Induction time 15 mins Pot Life 25°C 24 hrs Theoretical 12.0 m²/litre at 25 µm DFT Coverage 8.6 m²/litre at 35 µm DFT Thinner : Hi-Pon Epoxy Thinner Conventional air or airless spray are recommended for application are recommended for stripe coating and small areas. Care must be the specified dry film thickness. Airless Spray : Tip Size : 0.015" - 0.0 Pressure at Nozzle : 100 - 150 H Typical Thickness : 25 - 35 µm dry film 83 - 117 µm wet film B3 - 117 µm wet film Drying Time : Substrate Temperature : 25°C Surface Dry : 2 mins Through Dry : 6 mins Cured : 7 days Dry to Recoat (min) : 6 hrs Dry to recoat (max)* : Extended The given data must be considered as guidelines only. The actual before recoating may be shorter or longer, depending on film thick humidity, underlying paint system, requirement for early handling strength etc. A complete system can be described on a system parameters and special conditions could be included. "Where an "extended" overcoating time is stated, consult Nippor Coatings for recommended surface preparation to achieve or adhesion.	



HI-PON 20-09 EPOXY SHOP PRIMER FD AUTOBLAST

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PPON PAINT	

ZINKY-10 INORGANIC ZINC SHOP PRIMER

PRODUCT DESCRIPTION	Zinky-10 Inorganic Zinc Shop Primer is a two-pack, fast-drying, solvent-based coating composed of ethyl silicate and zinc dust. The type of zinc dust used complies with ASTM D 520 (Type II).
INTENDED USE	It is designed for use as a temporary primer on blast cleaned steel surface b automatic and manual spray to protect steel during production, storage and transport. Suitable for welding and gas cutting.
GENERAL PROPERTIES	Colour : Grey Gloss Level : Matt Volume Solids, % : 32 ± 2% Specific Gravity : 1.30 kg/l (Mixed) Flash Point : Base: 12°C Hardener: 12°C VOC : 584 g/L (EPA Method 24) Typical Thickness : 13 µm dry film 40 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). If oxidation has occurred between the blasting and application of this product, the surface should be reblasted 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 Damaged area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). After the surface preparation, repair the damaged area using recommended zinc epoxy primer or Zinky-10 (Zinky-10 is only for small areas of touch ups) Zinky-10 Inorganic Zinc Shop Primer should be applied over a surface that is dr and free from dirt, grease, oil and other contaminants and must be applied withit the overcoating intervals specified (refer to application section for details). Other Surfaces The coating should not be used on the other substrates. Please contact your loca Nippon Paint office for more information.
CONDITION DURING APPLICATION	Avoid paint application when the temperature is below 5°C and above 45°C, o humidity is below 50%. Increase the humidity by spraying water when humidit is below 50%. To achieve the best film performance, humidity should be kep above 65%.

Protective Coatings

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RECOMMENDED
PAINTING
SYSTEM

• Hi-Pon 20-04 STE 80 • Hi-Pon 20-04 STE IM 80

Topcoat

- Hi-Pon 20-10 Epoxy Zinc Phosphate 63 •
- Hi-Pon 30-02 Epoxy MIO 80 .
- Hi-Pon 30-03 Epoxy Midcoat 80 •

For the choice of coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation.

PACKAGING	Unit		Base	ŀ	lardener
		Vol	Container Size	Vol	Container Size
	18.4L	18L	20L	0.4L	1L

STORAGE	Shelf Life: Part A: 12 months (25°C) Part B: 12 months (25°C)
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 flushed with water and seek 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.

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ZINKY-10 INORGANIC ZINC SHOP PRIMER



ZINKY-10 INORGANIC ZINC SHOP PRIMER

APPLICATION GUIDE	Mixing Ratio	: Base:Hardener = 1:1.8 (by volume) Base and hardener should be mixed thoroughly before use. Do not add hardener into base.				
		After that, hardener should be added to base a agitated with mechanical agitator.				
		Mixed paint should be filt agitated during application		bly and should be		
	Pot Life	: 25°C 6 hrs				
	Theoretical Coverage	: 25 m²/litre at 13 μm DFT				
	Thinner	: Zinky-1000 Thinner				
APPLICATION METHOD	roller are recommen	r and airless spray are recommended for application. But mended for stripe coating and small areas. Care must be cified dry film thickness. Avoid mud cracking.				
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.017" : 50 – 100 kg/cm²			
	Typical Thickness	: 13 µm dry film 40 µm wet film				
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured* Dry to Recoat (min)*	: 25°C : 2 mins : 3 mins : 3 days : 24 hrs	40°C 2 mins 3 mins 3 days 24 hrs		
	Remarks: All zinc s					
	*Depends on humic					
	before recoating ma humidity, underlying strength etc. A cor	t be considered as guidelines ay be shorter or longer, depend g paint system, requirement for nplete system can be describ ecial conditions could be include	ding on film thick or early handling oed on a system	kness, ventilation, g and mechanical		
	The following coatir	The following coating system is recommended for Zinky-10:				
PAINTING SYSTEM	On Sa $2\frac{1}{2}$, 1 coat x 13 µm dry film thickness					
		coating system for different t Nippon Paint for professional				

PACKAGING	Unit		Base	F	lardener		
		Vol	Container Size	Vol	Container Size		
	4.2L	1.5L	5L	2.7L	5L		
STORAGE	Shelf Life		rt A: 6 months (25°C) rt B: 6 months (25°C)				
	Subject to re-inspection thereafter. Higher temperature during storage may response the shelf life and may lead to gelling in the tin. Frequent temperature cycler also shorten the shelf life. Store in tightly closed container in a dry, cool and well ventilated space, keep 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 flushed with water and seek 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. 						

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HI-PON 20-01 EPOXY PRIMER

PRODUCT DESCRIPTION	Hi-Pon 20-01 Epoxy Primer is a two-pack, high solids epoxy coating that offers good cathodic protection, and excellent resistance to water and seawater.
INTENDED USE	Universal anti-corrosive primer for use in aggressive environment. It is also suitable to be over-coated with various kinds of finishing coats.
GENERAL PROPERTIES	Colour : Red Oxide Gloss Level : Semi-gloss Volume Solids, % : 73 ± 2% Specific Gravity : 1.32 - 1.42 kg/l (Mixed) Flash Point : Base: 13.3°C Hardener: 12°C VOC : 230 g/L (EPA Method 24) Typical Thickness : 75 - 250 µm dry film 103 - 342 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 $2\frac{1}{2}$ (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. <u>Other Surfaces</u> 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 minimum 3°C above dew point of the surrounding air.
APPLICATION GUIDE	Mixing Ratio : Base:Hardener = 3:1 (by volume) Base and hardener should be mixed thoroughly before use. Induction time : 15 mins



HI-PON 20-01 EPOXY PRIMER

APPLICATION GUIDE	Pot Life	: 25°C 6 hrs				
	Theoretical Coverage	: 9.7 m ² /litre at 75 μm DFT 2.9 m ² /litre at 250 μm DFT				
	Thinner	: Hi-Pon Epoxy Thinner				
APPLICATION METHOD		ommended for application. Br d small areas. Care must be t				
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.017" – 0. : 150 – 170			
	Typical Thickness	: 75 – 250 μm dry film 103 – 342 μm wet film				
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)	: 25°C : 2 hrs : 4 hrs : 7 days : 4 hrs : 30 days	40°C 1 hrs 2 hrs 3 days 2 hrs 14 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 Intermediate • Hi-Pon 20-01 E	g systems are recommended	for Hi-Pon 20-0	1 Epoxy Primer:		
	 Hi-Pon 20-04 S Hi-Pon 20-04 S Hi-Pon 30-02 E 	TE 80 TE IM 80				
	 Hi-Pon 20-04 S Hi-Pon 20-04 S Hi-Pon 30-02 E Hi-Pon 30-03 E Topcoat Hi-Acryl 1901 A Hi-Pon 40-02 E Hi-Pon 40-04 E Hi-Pon 50-01 P 	TE 80 TE IM 80 poxy MIO 80 poxy Midcoat 80 crylic Top Coat poxy Topcoat				



HI-PON 20-01 EPOXY PRIMER

PACKAGING	Unit	t Base		Hardener				
		Vol	Container Size	Vol	Container Size			
	20L	15L	20L	5L	5L			
	5L	3.75L	5L	1.25L	5L			
STORAGE	Shelf Life		art A: 12 months (25°C art B: 12 months (25°C					
	the shelf life	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 tight from sources	nd well ventila	ited space, keep away					
SAFETY PRECAUTION	informat using th	ion display o e product.	led for use of profession In the container and in	the safety da	ata sheet (SDS) before			
	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 flushed with water and seek 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. 							

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HI-PON 20-03 EPOXY RED OXIDE PRIMER

PRODUCT DESCRIPTION	primer designed for us	Red Oxide Primer is a two-pack amine-adduct cured epoxy se as a high performance primer for many types of surfaces zing, steelwork, concrete, GRP and phenolic sheeting.
INTENDED USE	the civil engineering ar	erm corrosion of both ferrous and non-ferrous surfaces within nd building industry, and as lining systems for potable water age tanks, palm oil derivatives and vegetable oil.
GENERAL PROPERTIES	Gloss Level Volume Solids, % Specific Gravity Flash Point VOC	: Reddish Brown : Matt : 50 ± 2% : 1.20 – 1.40 kg/l (Mixed) : Base: 7°C Hardener: 23°C Mix: 7°C : 512 g/L (EPA Method 24) : 60 – 80 μm dry film 120 – 160 μm wet film
SURFACE	All surfaces should be	e clean, dry and free from contamination. The surface should
SURFACE PREPARATION	be assessed and trea removed in accordance Abrasive Blast Cleanin Abrasive blast cleanin performance, blast cleanin performance, blast cleanin product, the surface sl defect revealed by the the appropriate manne <u>Shop Primer Surface</u> This product is suitable with zinc silicate shop scattered breakdown necessary. Other type required complete rem areas should be blast of <u>Damaged Area</u> Damage area should be	 ated in accordance with ISO 8504. Oil or grease should be with SSPC-SP1 solvent cleaning. ag of the second sec

Protective Coatings

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HI-PON 20-03 EPOXY RED OXIDE PRIMER

SURFACE PREPARATION		<u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.					
CONDITION DURING APPLICATION		tion when the temperature is mperature of steel surface mu g air.					
APPLICATION GUIDE	Mixing Ratio	: Base:Hardener = 9:1 (by v Base and hardener should		ughly before use.			
	Pot Life	: 25°C 6 hrs					
	Theoretical Coverage	: 6.2 m²/litre at 80 µm DFT					
	Thinner	: Hi-Pon Epoxy Thinner					
APPLICATION METHOD APPLICATION		ommended for application. Bind small areas. Care must be to the small areas are must be to the state of the s	taken to achieve : 0.015" – 0.	the specified dry			
DETAILS		Pressure at Nozzle	: 140 – 170	kg/cm²			
	Typical Thickness	: 60 – 80 μm dry film 120 – 160 μm wet film					
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)*	: 25°C : 1 hr : 6 hrs : 7 days : 6 hrs : Extended	40°C 0.5 hrs 3 hrs 3 days 3 hrs			
	before recoating ma humidity, underlying strength etc. A cor	t be considered as guidelines ay be shorter or longer, depend g paint system, requirement for mplete system can be describ ecial conditions could be inclu	ding on film thick or early handling oed on a system	kness, ventilation, and mechanical			

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



HI-PON 20-03 EPOXY RED OXIDE PRIMER

RECOMMENDED PAINTING	The following coating systems are recommended for Hi-Pon 20-03 Epoxy Red Oxide Primer:				
SYSTEM	Intermediate • Hi-Pon 20-03 Epoxy White Primer • Hi-Pon 20-04 STE 80 • Hi-Pon 20-04 STE IM 80 • 30-02 Epoxy MIO 80 • 30-03 Epoxy Midcoat 80				
	 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 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	4.5L	5L	0.5L	1L		
	20L	18L	20L	2L	2.5L		
STORAGE	Shelf Life : Part A: 12 months (25°C) Part B: 12 months (25°C)						
	Subject to re-inspection thereafter. Higher temperature during storage mathematical shelf life and may lead to gelling in the tin. Frequent temperature cy also shorten the shelf life. Store in tightly closed container in a dry, cool and well ventilated space, ke from sources of heat and ignition.						
			gritton.				
SAFETY PRECAUTION	 This product is intended for use of professional applicators. Reinformation display on the container and in the safety data shousing the product. Use this product in well-ventilated area, avoid skin contact, spishould immediately be removed with suitable cleanser, soap a 						
		Id be well flu tact with this		seek medical	attention immediately		



HI-PON 20-03 EPOXY RED OXIDE PRIMER



HI-PON 20-03 EPOXY WHITE PRIMER

PRODUCT DESCRIPTION	Hi-Pon 20-03 Epoxy White Primer is a two-pack amine-adduct cured epoxy primer designed for use as a high performance primer for many types of surfaces i.e. aluminium, galvanizing, steelwork, concrete, GRP and phenolic sheeting.
INTENDED USE	As a primer for long term corrosion of both ferrous and non-ferrous surfaces within the civil engineering and building industry, and as lining systems for potable water, chemical and fuel storage tanks, palm oil derivatives and vegetable oil.
GENERAL PROPERTIES	Colour: WhiteGloss Level: Low-glossVolume Solids, %: 55 ± 2%Specific Gravity: 1.25 - 1.38 kg/l (Mixed)Flash Point: Base: 7°CVOC: 502 g/L (EPA Method 24)Typical Thickness: 60 - 80 µm dry film 110 - 145 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. <u>Abrasive Blast Cleaning</u> 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. <u>Shop Primer Surface</u> This product is suitable for application to the unweathered steelwork freshly coated with zinc silicate shop primers. If the zinc shop primer shows extensive or widely scattered breakdown or excessive zinc corrosion, overall sweep blasting

This product is suitable for application to the unweathered steelwork freshly coated with zinc silicate shop primers. If the zinc shop primer shows extensive or widely scattered breakdown or excessive zinc corrosion, overall sweep blasting will be necessary. Other types of shop primer are not suitable for over coating and will required complete removal by abrasive blast cleaning. Weld seams and damaged areas should be blast cleaned to Sa $2\frac{1}{2}$ (ISO 8501- 1:2007).

Damaged Area

Damage area should be prepared with abrasive blast cleaning to Sa $2^{1\!/_2}$ (ISO 8501-1:2007). When abrasive blasting in small area is not possible, mechanical cleaning to St 3 (ISO 8501-1:2007) is acceptable.

Hi-Pon 20-03 Epoxy White Primer should be applied over a surface that is dry and free from all contamination and must be applied within the overcoating intervals specified (refer to application section for details).

Protective Coatings

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SAFETY PRECAUTION

• 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 to 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.



HI-PON 20-03 EPOXY WHITE PRIMER

DURING APPLICATION is over 85%. The temperature of steel surface must be a minimum 3°C point of surrounding air. APPLICATION GUIDE Mixing Ratio : Base:Hardener = 9:1 (by volume) Base and hardener should be mixed thoroughly Pot Life Pot Life : 25°C 5 hrs Theoretical : 6.8 m²/litre at 80 µm DFT Coverage Thinner Thinner : Hi-Pon Epoxy Thinner APPLICATION METHOD Airless spray is recommended for application. Brush and roller are refor stripe coating and small areas. Care must be taken to achieve the still minickness. APPLICATION DETAILS Airless Spray : Tip Size : 0.015" - 0.021" Pressure at Nozzle Detrails Airless Spray : Substrate Temperature : 25°C 4 Surface Dry Drying Time : Substrate Temperature : 25°C 4 Surface Dry : 1 hr 0 Through Dry : 6 hrs 3 Dry to Recoat (min) : 6 hrs 3 Dry to Recoat (max)" : Extended The given data must be considered as guidelines only. The actual dryin before recoating may be shorter or longer, depending on film thickness humidity. underly paint system, requirement for early handling and strength etc. A complete system can be described on a system she parameters and special conditions could be included.	RATION Th	<u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information. 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.					
GUIDE Base and hardener should be mixed thoroughly Pot Life : 25°C 5 hrs Theoretical Coverage : 6.8 m²/litre at 80 µm DFT Thinner : Hi-Pon Epoxy Thinner APPLICATION METHOD Airless spray is recommended for application. Brush and roller are refor stripe coating and small areas. Care must be taken to achieve the sfilm thickness. APPLICATION DETAILS Airless Spray : Tip Size : 0.015" - 0.021" Pressure at Nozzle : 140 - 170 kg/cn Typical Thickness : 60 - 80 µm dry film 110 - 145 µm wet film Drying Time : Substrate Temperature : 25°C 4 Surface Dry : 1 hr 0 Through Dry : 6 hrs 3 Dry to Recoat (min) : 6 hrs 3 Dry to Recoat (max)* : Extended The given data must be considered as guidelines only. The actual dryin before recoating may be shorter or longer, depending on film thickness humidity, underlying paint system, requirement for early handling and strength etc. A complete system can be described on a system she parameters and special conditions could be included. "Where an "extended" overcoating time is stated, consult Nippon Pain	G ^{is}						
Pot Life : 25°C S hrs Theoretical : 6.8 m²/litre at 80 μm DFT Coverage Thinner : Hi-Pon Epoxy Thinner APPLICATION METHOD Airless spray is recommended for application. Brush and roller are refor stripe coating and small areas. Care must be taken to achieve the still thickness. APPLICATION DETAILS Airless Spray : Tip Size : 0.015" – 0.021" Pressure at Nozzle Image: Comparison of the intervention of the interventing and strength etc. A complete system can be described	ATION M	lixing Ratio	: Base:Hardener = 9:1 (by v	volume)			
5 hrs Theoretical Coverage : 6.8 m²/litre at 80 µm DFT Thinner : Hi-Pon Epoxy Thinner APPLICATION METHOD Airless spray is recommended for application. Brush and roller are refor stripe coating and small areas. Care must be taken to achieve the sfilm thickness. APPLICATION DETAILS Airless Spray : Tip Size : 0.015" - 0.021" Pressure at Nozzle : 140 - 170 kg/cm Typical Thickness : 60 - 80 µm dry film : 110 - 145 µm wet film Drying Time : Substrate Temperature : 25°C 4 Surface Dry Dry to Recoat (min) : 6 hrs 3 Dry to Recoat (min) : 6 hrs The given data must be considered as guidelines only. The actual dryin before recoating may be shorter or longer, depending on film thickness humidity, underlying paint system, requirement for early handling and strength etc. A complete system can be described on a system she parameters and special conditions could be included.			Base and hardener should	d be mixed thorou	ughly before use.		
Theoretical Coverage : 6.8 m²/litre at 80 µm DFT Thinner : Hi-Pon Epoxy Thinner APPLICATION METHOD Airless spray is recommended for application. Brush and roller are refor stripe coating and small areas. Care must be taken to achieve the still film thickness. APPLICATION DETAILS Airless Spray : Tip Size : 0.015" - 0.021" Pressure at Nozzle Typical Thickness : 60 - 80 µm dry film 110 - 145 µm wet film : Drying Time : Substrate Temperature : 25°C Surface Dry : 1 hr 0 Through Dry : 6 hrs Dry to Recoat (min) : 6 hrs 3 Dry to Recoat (max)* : Extended The given data must be considered as guidelines only. The actual dryin before recoating may be shorter or longer, depending on film thickness humidity, underlying paint system, requirement for early handling and strength etc. A complete system can be described on a system she parameters and special conditions could be included. "Where an "extended" overcoating time is stated, consult Nippon Pain	Po	ot Life					
 APPLICATION METHOD Airless spray is recommended for application. Brush and roller are refor stripe coating and small areas. Care must be taken to achieve the sfilm thickness. APPLICATION DETAILS Airless Spray : Tip Size : 0.015" - 0.021" Pressure at Nozzle : 140 - 170 kg/cm Typical Thickness : 60 - 80 µm dry film 110 - 145 µm wet film Drying Time : Substrate Temperature : 25°C 4 Surface Dry : 1 hr 0 Through Dry : 6 hrs 3 Cured : 7 days 3 Dry to Recoat (min) : 6 hrs 3 Dry to Recoat (max)* : Extended The given data must be considered as guidelines only. The actual dryin before recoating may be shorter or longer, depending on film thickness humidity, underlying paint system, requirement for early handling and strength etc. A complete system can be described on a system she parameters and special conditions could be included. "Where an "extended" overcoating time is stated, consult Nippon Pain 							
METHOD for stripe coating and small areas. Care must be taken to achieve the still thickness. APPLICATION DETAILS Airless Spray Tip Size : 0.015" - 0.021" Pressure at Nozzle : 140 - 170 kg/cm Typical Thickness : 60 - 80 µm dry film 110 - 145 µm wet film 110 - 145 µm wet film Drying Time : Substrate Temperature : 25°C Yees and the state of the state transperature : 25°C 4 Surface Dry : 1 hr 0 Through Dry : 6 hrs 3 Cured : 7 days 3 Dry to Recoat (min) : 6 hrs 3 Dry to Recoat (max)* : Extended The given data must be considered as guidelines only. The actual dryin before recoating may be shorter or longer, depending on film thickness humidity, underlying paint system, requirement for early handling and strength etc. A complete system can be described on a system she parameters and special conditions could be included. "Where an "extended" overcoating time is stated, consult Nippon Pain	Th	hinner	: Hi-Pon Epoxy Thinner				
110 – 145 μm wet film Drying Time : Substrate Temperature : 25°C 4 Surface Dry : 1 hr 0 Through Dry : 6 hrs 3 Cured : 7 days 3 Dry to Recoat (min) : 6 hrs 3 Dry to Recoat (max)* : Extended The given data must be considered as guidelines only. The actual dryin before recoating may be shorter or longer, depending on film thickness humidity, underlying paint system, requirement for early handling and strength etc. A complete system can be described on a system she parameters and special conditions could be included. "Where an "extended" overcoating time is stated, consult Nippon Pain		irless Spray					
Drying Time : Substrate Temperature : 25°C 4 Surface Dry : 1 hr 0 Through Dry : 6 hrs 3 Cured : 7 days 3 Dry to Recoat (min) : 6 hrs 3 Dry to Recoat (max)* : Extended The given data must be considered as guidelines only. The actual dryin before recoating may be shorter or longer, depending on film thickness humidity, underlying paint system, requirement for early handling and strength etc. A complete system can be described on a system she parameters and special conditions could be included. "Where an "extended" overcoating time is stated, consult Nippon Pain	-	/pical Thickness					
before recoating may be shorter or longer, depending on film thickness humidity, underlying paint system, requirement for early handling and strength etc. A complete system can be described on a system she parameters and special conditions could be included. "Where an "extended" overcoating time is stated, consult Nippon Pain	Dr	rying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min)	: 1 hr : 6 hrs : 7 days : 6 hrs	40°C 0.5 hrs 3 hrs 3 days 3 hrs		
	be hu str	efore recoating may umidity, underlying trength etc. A com	y be shorter or longer, depen paint system, requirement f plete system can be describ	ding on film thick or early handling bed on a system	ness, ventilation, and mechanical		
Coatings for recommended surface preparation to achieve optim adhesion.	Co	oatings for recom					



HI-PON 20-03 EPOXY WHITE PRIMER

RECOMMENDED PAINTING	The following coating systems are recommended for Hi-Pon 20-03 Epoxy White Primer:
SYSTEM	Intermediate • Hi-Pon 20-03 Epoxy Red Oxide Primer • Hi-Pon 20-04 STE 80 • Hi-Pon 20-04 STE IM 80 • Hi-Pon 30-02 Epoxy MIO 80 • Hi-Pon 30-03 Epoxy Midcoat 80 Topcoat • Hi-Pon 40-02 Epoxy Top Coat • Hi-Pon 40-02 Epoxy Top Coat • Hi-Pon 50-01 Polyurethane Top Coat • Hi-Pon 50-03 Polyurethane Top Coat • Hi-Pon 50-03 Polyurethane Top Coat • Hi-Pon 50-03 Polyurethane Top Coat

PACKAGING	Unit	Base		ase Harden		
		Vol	Container Size	Vol	Container Size	
	5L	4.5L	5L	0.5L	1L	
	20L	18L	20L	2L	5L	
STORAGE	Shelf Life		art A: 12 months (25°C art B: 12 months (25°C	,		
	Subject to re-inspection thereafter. Higher temperature during storage may re the shelf life and may lead to gelling in the tin. Frequent temperature cycles also shorten the shelf life. Store in tightly closed container in a dry, cool and well ventilated space, keep from sources of heat and ignition.					
SAFETY PRECAUTION	informati using the	on display or product.	led for use of profession n the container and in ell-ventilated area, avo	the safety da		
	• Eye shou		e removed with suitab ushed with water and s s product.	,	'	



HI-PON 20-03 EPOXY WHITE PRIMER

SAFETY PRECAUTION

• 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

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HI-PON 20-07 EPOXY ZINC PHOSPHATE 70

PRODUCT DESCRIPTION	Hi-Pon 20-07 Epoxy Zinc Phosphate 70 is a two-pack, high build, fast drying zinc phosphate epoxy coating.		
INTENDED USE	An anti-corrosive primer and/or intermediate coating for corrosion protection of steel and other substrates in atmospheric environments.		
GENERAL PROPERTIES	Colour : Pink & Red Gloss Level : Low-gloss Volume Solids, % : 70 ± 2 % Specific Gravity : 1.46 – 1.56 kg/l (Mixed) Flash Point : Base: 23°C Hardener: 12°C Mix: 12°C VOC : 260 g/L (EPA Method 24) Intervention Intervention Typical Thickness : 100 – 250 µm dry film Intervention Intervention		
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. <u>Abrasive Blast Cleaning</u> 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. <u>Other Surfaces</u> 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 Steel surface temperature must be minimum 3°C above dew point of the surrounding air.		
APPLICATION GUIDE	Mixing Ratio : Base:Hardener = 4:1 (by volume) Base and hardener should be mixed thoroughly before use. Induction time : 15 mins Pot Life : 25°C 2 hrs		

Protective Coatings

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APPLICATION

APPLICATION

APPLICATION

RECOMMENDED

METHOD

DETAILS

GUIDE

Theoretical

film thickness.

Airless Sprav

Drying Time

Phosphate 70:

Typical Thickness

Coverage Thinner

HI-PON 20-07 EPOXY ZINC PHOSPHATE 70

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

: .017" - 0.027"

: 25°C

: 1 hr

: 3 hrs

: 7 days

: 3 mths

: 3 hrs

: 150 - 200 kg/cm²

40°C

1 hrs

1 hr

3 days

3 mths

0.5 hrs

: 7.2 m²/litre at 100 µm DFT 2.9 m²/litre at 250 µm DFT

: Hi-Pon Epoxy Thinner

Pressure at Nozzle

: 100 – 250 μm dry film 143 – 357 μm wet film

: Substrate Temperature

Dry to Recoat (min)

Dry to Recoat (max)

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

The following coating systems are recommended for Hi-Pon 20-07 Epoxy Zinc

Surface Dry

Through Dry

Cured

parameters and special conditions could be included.

: Tip Size



HI-PON 20-07 EPOXY ZINC PHOSPHATE 70

PACKAGING	Unit	Base		Hardener	
		Vol	Container Size	Vol	Container Size
	20L	16L	20L	4L	5L
	5L	4L	5L	1L	1L
STORAGE	Shelf Life		rt A: 12 months (25°C rt B: 12 months (25°C		
			nereafter. Higher temp to gelling in the tin.	erature durin	g storage may reduc
	Store in tightl from sources		tainer in a dry, cool an gnition.	d well ventila	ated space, keep awa
SAFETY PRECAUTION	informati		ed for use of profession the container and in		
		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 shou	uld be well flu ntact with this	shed with water and s	seek medical	attention immediate
	 Eye shou upon cor During the second sec	ntact with this	shed with water and s	ing operatio	

DISCLAIMER

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PAINTING	Phosphate 70:
SYSTEM	Intermediate Hi-Pon 20-04 STE 80 Hi-Pon 20-04 STE IM 80 Hi-Pon 20-07 Epoxy Zinc Phosphate 70 Hi-Pon 30-02 Epoxy MIO 80 Hi-Pon 30-03 Epoxy Midcoat 80
	 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

For the choice of coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation.



HI-PON 20-10 EPOXY ZINC PHOSPHATE 63

PRODUCT DESCRIPTION	Hi-Pon 20-10 Epoxy Zinc Phosphate 63 is a two-pack, fast drying polyamide- cured epoxy primer pigmented with zinc phosphate.				
INTENDED USE		sure. Suitable for	n of correctly prepar use in both new cons		-
GENERAL PROPERTIES	Colour Gloss Level Volume Solids, % Specific Gravity Flash Point VOC Typical Thickness	: Red : Matt : 63 ± 2% : 1.43 kg/l (Mixed) : Base: 23°C : 360 g/L (EPA Me : 50 - 80 µm dry fi	Hardener: 23°C thod 24) Im	Mix: 23°C	
SURFACE PREPARATION		eated in accordanc nce with SSPC-SP	e from contamination. e with ISO 8504. Oil c		-
	Abrasive blast clean performance, blast c (2 – 3 mils). If oxida this product, the su Surface defect revea treated in the approp	ing to Sa 2½ (ISO leaned to SSPC-SF tition has occurred rface should be re- aled by the blast cle priate manner.	8501-1:2007) or SSPC P10 with a surface profil between the blasting blasted to the specifi paning process should	le of 50 – 75 microns and application of ed visual standard.	
	coated with zinc silic widely scattered bre will be necessary. C and will required con	table for applicatic cate shop primers. I eakdown or excess Other types of shop mplete removal by	n to the unweathered f the zinc shop primer ive zinc corrosion, ove primer are not suitat abrasive blast cleanin d to Sa 2½ (ISO 8501-	shows extensive or erall sweep blasting ble for over coating g. Weld seams and	
		abrasive blasting is	n abrasive blast clear not possible, mechan		
	is dry and free from	oil and other cont	3 should be applied aminations. It must be application section fo	e applied within the	



Other Surfaces The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.			
exceeds 85%. The t	emperature of steel surface n		
Mixing Ratio	: Base:Hardener = 4:1 (by v	olume)	
	Base and hardener should	l be mixed thorou	ighly before use.
Pot Life	: 25°C 5 hrs		
Theoretical Coverage	: 7.88 m²/litre at 80 µm DFT		
Thinner	: Hi-Pon Epoxy Thinner		
are recommended for	or stripe coating and small area		
Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.0 : 150 - 200 kg	
Typical Thickness	: 50 – 80 µm dry film 79 – 127 µm wet film		
Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)	: 25°C : 45 mins : 3 hrs : 7 days : 3 hrs : 90 days	40°C 30 mins 2 hrs 3 days 2 hrs 90 days
	The coating may be Paint office for more Avoid paint applicat exceeds 85%. The t point of surrounding Mixing Ratio Pot Life Theoretical Coverage Thinner Conventional air or a are recommended fo the specified dry film Airless Spray Typical Thickness	The coating may be used on other substrates. Ple Paint office for more information. Avoid paint application when the temperature is exceeds 85%. The temperature of steel surface in point of surrounding air. Mixing Ratio : Base:Hardener = 4:1 (by v Base and hardener should Pot Life Pot Life : 25°C 5 hrs Theoretical Theoretical : 7.88 m²/litre at 80 µm DFT Coverage Thinner Thenoretical : 7.88 m²/litre at 80 µm DFT Coverage Environment Thinner : Hi-Pon Epoxy Thinner Conventional air or airless spray are recommende are recommended for stripe coating and small area the specified dry film thickness. Airless Spray : Tip Size Pressure at Nozzle Typical Thickness : 50 – 80 µm dry film 79 – 127 µm wet film Drying Time : Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min)	The coating may be used on other substrates. Please contact your Paint office for more information. Avoid paint application when the temperature is below 10°C or receeds 85%. The temperature of steel surface must be minimum point of surrounding air. Mixing Ratio : Base:Hardener = 4:1 (by volume) Base and hardener should be mixed thorout be the specified in the substrate state of the specified dry film thickness. Conventional air or airless spray are recommended for application. are recommended for stripe coating and small areas. Care must be the specified dry film thickness. Airless Spray : Tip Size : 0.015" - 0.0 Pressure at Nozzle Typical Thickness : 50 - 80 µm dry film 79 - 127 µm wet film Drying Time : Substrate Temperature : 25°C Surface Dry Surface Dry : 45 mins Theoretical : 7.00 µm dry film Cured : 7 days Dry to Recoat (min) : 3 hrs

NIPPON PAINT

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.



PAINTING

SYSTEM

HI-PON 20-10 EPOXY ZINC PHOSPHATE 63



HI-PON 20-10 EPOXY ZINC PHOSPHATE 63

SAFETY PRECAUTION

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

DISCLAIMER

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RECOMMENDED	Intermediate
	 Hi-Pon 20-04 STE 80
PAINTING	

Hi-Pon 20-04 STE IM 80 •

- Hi-Pon 30-02 Epoxy MIO 80 •
- Hi-Pon 30-03 Epoxy Midcoat 80 •
- Hi-Pon 30-04 Epoxy MIO 70 •

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 •

For the choice of coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation.

PACKAGING	Unit	Base		F	lardener
		Vol	Container Size	Vol	Container Size
	5L	4L	5L	1L	1L
	20L	16L	20L	4L	5L

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. 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 flushed with water and seek 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.



ZINKY-12 INORGANIC ZINC RICH PRIMER 77

PRODUCT DESCRIPTION	Zinky-12 Inorganic Zinc Rich Primer 77 is a two-pack, solvent-based coating composed of ethyl silicate and zinc dust. It is suitable for use on steel as a primer for high performance systems and as a single treatment coating for a variety of marine environment. It prevents corrosion and provides excellent resistance to weathering, abrasion, impact, heat and many solvents. The level of zinc dust by weight present in the dried film conforms to SSPC-Paint 20 (Level 2). The type of zinc dust used complies with ASTM D 520 (Type II). It has been tested for Slip Coefficient and Creep Resistance, using ASTM A490 bolts and meets Class B requirements by RCSC Specification for Structural Joints Using High-Strength Bolts (Appendix A).		
INTENDED USE	Recommended coating systems based on Zinky-12 Inorganic Zinc Rich Primer 77 are suitable for severe corrosive environments such as offshore platforms, petrochemical complexes, gas and petroleum refineries, pulp and paper mills and corrosive chemical plants.		
GENERAL PROPERTIES	Colour: GreyGloss Level: MattVolume Solids, %: $58 \pm 2\%$ Specific Gravity: $2.18 \text{ kg/l (Mixed)}$ Flash Point: Base: 22° CMix: 22° CVOC: $556 \text{ g/L (EPA Method 24)}$ Typical Thickness: $50 - 75 \mu m dry fillm$ $86 - 129 \mu m wet film$		
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). 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. Damaged Area Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). After the surface preparation, repair the damaged area using Zinky-12. Zinky-12 Inorganic Zinc Rich Primer 77 should be applied over a surface that is dry and free from dirt, grease, oil and other contaminants and must be applied within the overcoating intervals specified (refer to application section for details).		

ZINKY-12 INORGANIC ZINC RICH PRIMER 77

SURFACE PREPARATION		Other Surfaces The coating should not be used on other substrates. Please contact your local Nippon Paint office for more information.		
CONDITION DURING APPLICATION	temperature of steel air. To achieve the b	ation when the temperature surface must be a minimum 3° est film performance, curing te v 65% above. When humidity	C above dew po mperature shoul	int of surrounding d be kept at 10°C
APPLICATION GUIDE	Mixing Ratio	: Base:Hardener 0.685:1 (b) 4.5:1 (b)	y weight) y volume)	
		Add zinc powder (Harden before use.	er) into Base an	d mix thoroughly
	Pot Life	: 25°C 4 hrs		
	Theoretical Coverage	: 11.6 m²/litre at 50 µm DFT 7.73 m²/litre at 75 µm DFT		
	Thinner	: Zinky-2000 Thinner		
APPLICATION METHOD APPLICATION DETAILS	roller are recommer achieve the specifie	Id airless spray are recomme Ided for stripe coating and sn d dry film thickness. Avoid mu : Tip Size Pressure at Nozzle	nall areas. Care	must be taken to
	Typical Thickness	: 50 – 75 µm dry film 86 – 129 ym wet film		
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured* Dry to Recoat (min) Dry to Recoat (max)**	: 25°C : 10 mins : 2 hrs : 4.5 hrs : 4.5 hrs : Extended	40°C 5 mins 1 hr 2 hrs 2 hrs
	Remarks: All zinc s	alts should be removed prior t	o overcoating	
	before recoating ma humidity, underlying strength etc. A con	t be considered as guidelines by be shorter or longer, depend paint system, requirement for plete system can be describ	ding on film thick or early handling led on a system	ness, ventilation, and mechanical

NIPPON PAINT

Protective Coatings

parameters and special conditions could be included.



ZINKY-12 INORGANIC ZINC RICH PRIMER 77

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ZINKY-12 INORGANIC ZINC RICH PRIMER 77

SAFETY PRECAUTION	 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 flushed with water and seek 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

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APPLICATION DETAILS	*Depends on humidity conditions **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 coating systems are recommended for Zinky-12 Inorganic Zinc Rich Primer 77: Intermediate • Hi-Pon 20-04 STE 80 • Hi-Pon 20-04 STE IM 80 • Hi-Pon 30-02 Epoxy MIO 80 • Hi-Pon 30-03 Epoxy Mid coat 80 Topcoat • Hi-Pon 40-02 Epoxy Top Coat • Hi-Pon 40-04 Epoxy Top Coat • Hi-Pon 50-01 Polyurethane Top Coat • Hi-Pon 50-01 Polyurethane Top Coat • Hi-Pon 50-03 Polyurethane Top Coat • Hi-Floro 6738 Fluorocarbon Top Coat

PACKAGING	Unit	Base		F	lardener
		Vol	Container Size	Vol	Container Size
	10.6kg (4.86 L)	4.3kg	5L	6.3kg	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. 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.



ZINKY-13 INORGANIC ZINC RICH PRIMER 85

PRODUCT DESCRIPTION	Zinky-13 Inorganic Zinc Rich Primer 85 is a two-pack, solvent-based coating composed of ethyl silicate and zinc dust. It is suitable for use on steel a primer for high performance systems and as a single treatment coating for a variety of marine environment. It prevents corrosion and provides excellent resistance to weathering, abrasion, impact, heat and many solvents. The level of zinc dust by weight present in the dried film conforms to SSPC-Paint 20 (Level 1) and ISO 12944-5. The type of zinc dust used complies with ASTM D 520 (Type II).				
INTENDED USE	Recommended coating systems based on Zinky-13 Inorganic Zinc Rich Primer 85 are suitable for severe corrosive environments such as offshore platforms, petrochemical complexes, gas and petroleum refineries, pulp and paper mills and corrosive chemical plants.				
GENERAL PROPERTIES	Colour : Grey Gloss Level : Matt Volume Solids,% : 62 ± 2% Specific Gravity : 2.67 kg/l (Mixed) Flash Point : Base: 23°C Mix: 23°C VOC : 501 g/L (EPA Method 24) Typical Thickness : 50 – 75 µm dry film 80 – 121 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). 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. Damaged Area Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). After the surface preparation, repair the damaged area using Zinky-13. Zinky-13 Inorganic Zinc Rich Primer 85 should be applied over a surface that is dry and free from dirt, grease, oil and other contaminants and must be applied within the overcoating intervals specified (refer to application section for details). Other Surfaces The coating should not be used on other substrates. Please contact your local Nippon Paint office for more information.				



VIPPON PAIN

DURING

Avoid paint application when the temperature is below 5°C above 45°C. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air. To achieve the best film performance, curing temperature should be kept at 10°C above and humidity 65% above. When humidity is less than 65%, spray water to

APPLICATION GUIDE	Mixing Ratio	: Base:Hardener 0.426:1 (by weight) 2.8:1 (by volume) Add zinc powder (Hardener) into Base and mix thoroug before use.		
	Pot Life	: 25°C 4 hrs		
	Theoretical Coverage	: 12.4 m²/litre at 50 μm DFT 8.2 m²/litre at 75 μm DFT		
	Thinner	: Zinky-2000 Thinner		
APPLICATION METHOD	roller are recommen	1 2	ded for application. Brush and all areas. Care must be taken to d cracking.	
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.023" : 120 – 150 kg/cm²	
	Typical Thickness	: 50 – 75 µm dry film		

Typical Thickness	: 50 – 75 µm dry film		
	80 – 121 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 10 mins	5 mins
	Through Dry	: 2 hrs	1 hr
	Cured*	: 4.5 hrs	2 hrs
	Dry to Recoat (min)	: 4.5 hrs	2 hrs
	Dry to Recoat (max)**	: Extended	

Remarks: All zinc salts should be removed prior to overcoating

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.

*Depends on humidity conditions

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



ZINKY-13 INORGANIC ZINC RICH PRIMER 85

RECOMMENDED PAINTING	The following coating systems are recommended for Zinky-13 Inorganic Zinc Rich Primer 85:
SYSTEM	Intermediate
	• Hi-Pon 20-04 STE 80
	• Hi-Pon 20-04 STE IM 80
	Hi-Pon 30-02 Epoxy MIO 80
	Hi-Pon 30-03 Epoxy Midcoat 80
	Topcoat
	Hi-Pon 40-02 Epoxy Top Coat
	Hi-Pon 40-04 Epoxy Top Coat
	Hi-Pon 50-01 Polyurethane Top Coat

- HI-Pon 50-01 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		ŀ	lardener
		Vol	Container Size	Vol	Container Size
	14.3kg (5.36L)	4.3kg	5L	10kg	10L

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 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 flushed with water and seek medical attention immediately upon contact with this product.



ZINKY-13 INORGANIC ZINC RICH PRIMER 85

SAFETY PRECAUTION

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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.

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ZINKY-21 EPOXY ZINC RICH PRIMER 77

PRODUCT DESCRIPTION	Zinky-21 Epoxy Zinc Rich Primer 77 is a two-pack, fast dry, zinc-rich epoxy primer. It provides excellent corrosion resistance with hard, abrasion and weathering resistant film. The level of zinc dust by weight present in the dried film conforms to SSPC-Paint 20 (Level 2). The type of zinc dust used complies with ASTM D 520 (Type II).			
INTENDED USE	It is designed as a primer for long-life protection on steel surfaces of bridges, petrochemicals, power generations, offshore facilities, port machineries and hydro facilities in highly corrosion environment.			
GENERAL PROPERTIES				
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). 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. Shop Primer Surface This product is suitable for application to the unweathered steelwork freshly coated with zinc silicate shop primers. If the zinc shop primer shows extensive or widely scattered breakdown or excessive zinc corrosion, overall sweep blasting and will required complete removal by abrasive blast cleaning. Weld seams and damaged areas should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). When abrasive blasting in small area is not possible, mechanical cleaning to St 3 (ISO 8501-1:2007) is acceptable. After the surface preparation, repair the damaged area using Zinky-21.			

ZINKY-21 EPOXY ZINC RICH PRIMER 77

SURFACE PREPARATION	Zinky-21 Epoxy Zinc Rich Primer 77 should be applied over a surface that is dry and free from oil and other contaminations. It must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.					
CONDITION DURING APPLICATION	relative humidity is o	Avoid paint application when the temperature is below 10°C above 45°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 GUIDE	Mixing Ratio Pot Life	: Base:Hardener 2.9:1 (by volume) Base and hardener should be mixed thoroughly be : 25°C 6 hrs				
	Theoretical Coverage Thinner	 11.6 m²/litre at 50 μm DFT 7.2 m²/litre at 80 μm DFT Hi-Pon Epoxy Thinner 				
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry			
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.021" : 120 – 150 kg/cm²			
	Typical Thickness	: 50 – 80 µm dry film 85 – 138 µm wet film				
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured* Dry to Recoat (min) Dry to Recoat (max)*	: 10°C 25°C 40°C : 1 hr 0.3 hrs 0.2 hrs : 8 hrs 3 hrs 2 hrs : 14 days 7 days 3 days : 8 hrs 3 hrs 2 hrs : 3 mths 3 mths 3 mths			
	before recoating ma humidity, underlying strength etc. A com	y be shorter or longer, depend paint system, requirement fo	only. The actual drying time/times ing on film thickness, ventilation, r early handling and mechanical ed on a system sheet, where all led.			

*Consult Nippon Paint for extended requirement.



ZINKY-21 EPOXY ZINC RICH PRIMER 77

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ZINKY-21 EPOXY ZINC RICH PRIMER 77

SAFETY PRECAUTION

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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.

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RECOMMENDED	The following coating systems are recommended for Zinky-21 Epoxy Zinc Rich
PAINTING	Primer 77:
SYSTEM	Intermediate HI-Pon 20-04 STE 80

- Hi-Pon 20-04 STE IM 80 .
- Hi-Pon 30-02 Epoxy MIO 80 .
- Hi-Pon 30-03 Epoxy Midcoat 80

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		
	10L	7.4L	14L	2.6L	5L		
STORAGE	Shelf Life		art A: 12 months (25°C art B: 12 months (25°C				
	the shelf life also shorten	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 awa					
	from sources				F,F		
SAFETY PRECAUTION	informat		ded for use of profession n the container and in				
		 Use this product in well-ventilated area, avoid skin contact, spillage on the ski should immediately be removed with suitable cleanser, soap and water. Eye should be well flushed with water and seek medical attention immediatel upon contact with this product. 					



ZINKY-22 EPOXY ZINC RICH PRIMER 80

PRODUCT DESCRIPTION	Zinky-22 Epoxy Zinc Rich Primer 80 is a two-pack, fast dry, zinc-rich epoxy primer. It provides excellent corrosion resistance with hard, abrasion and weathering resistant film. The level of zinc dust by weight present in the dried film conforms to SSPC-Paint 20 (Level 2) and ISO 12944-5. The type of zinc dust used complies with ASTM D 520 (Type II).
INTENDED USE	It is designed as a primer for long-life protection on steel surfaces of bridges, petrochemicals, power generations, offshore facilities, port machineries and hydro facilities in highly corrosion environment.
GENERAL PROPERTIES	Colour: GreyGloss Level: MattVolume Solids, %: 65 ± 2%Specific Gravity: 2.62 kg/l (Mixed)Flash Point: Base: 23°CHardener: 23°CMix: 23°CVOC: 384 g/L (EPA Method 24)Typical Thickness: 50 - 80 µm dry film .77 - 123 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. <u>Abrasive Blast Cleaning</u> Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). 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. <u>Shop Primer Surface</u> This product is suitable for application to the unweathered steelwork freshly coated with zinc silicate shop primers. If the zinc shop primer shows extensive or widely scattered breakdown or excessive zinc corrosion, overall sweep blasting will be necessary. Other types of shop primer are not suitable for over coating and will required complete removal by abrasive blast cleaning. Weld seams and damaged area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501- 1:2007). When abrasive blasting in small area is not possible, mechanical cleaning to St 3 (ISO 8501-1:2007) is acceptable. After the surface preparation, repair the damaged area using Zinky-22.

ZINKY-22 EPOXY ZINC RICH PRIMER 80

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SURFACE PREPARATION	Zinky-22 Epoxy Zinc Rich Primer 80 should be applied over a surface that is dry and free from oil and other contaminations. It must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.						
CONDITION DURING APPLICATION		tion when the temperature is ver 85%. The temperature of st t of surrounding air.					
APPLICATION GUIDE	Mixing Ratio Pot Life Theoretical Coverage Thinner	 Base:Hardener 3.8:1 (by voli Base and hardener should b 25°C 6 hrs 13.0 m²/litre at 50 μm DFT 8.1 m²/litre at 80 μm DFT Hi-Pon Epoxy Thinner 	,	roughly b	efore use.		
APPLICATION METHOD		mmended for application. Brus d small areas. Care must be tak					
APPLICATION DETAILS	times before recoati ventilation, humidity and mechanical str	 Tip Size Pressure at Nozzle 50 – 80 μm dry film 77 – 123 μm wet film Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)* the considered as guidelines ing may be shorter or longer, , underlying paint system, re rength etc. A complete syst e all parameters and special 	depending equirement em can be	25°C 0.3 hrs 3 hrs 7 days 3 hrs 3 mths actual dr on film for early	2 hrs 3 mths ying time/ thickness, handling bed on a		

*Consult Nippon Paint for extended requirement.



ZINKY-22 EPOXY ZINC RICH PRIMER 80

RECOMMENDED PAINTING	The following coating systems are recommended for Zinky-22 Epoxy Zinc Rich Primer 80:
SYSTEM	Intermediate
	• Hi-Pon 20-04 STE 80
	• Hi-Pon 20-04 STE IM 80
	 Hi-Pon 30-02 Epoxy MIO 80
	Hi-Pon 30-03 Epoxy Midcoat 80
	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	Unit Base		ŀ	lardener		
		Vol Container Size		Vol	Container Size		
	10L	7.9L	14L	2.1L	5L		
STORAGE	Shelf Life		rrt A: 12 months (25°C rrt 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 flushed with water and seek 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. 						



ZINKY-22 EPOXY ZINC RICH PRIMER 80

SAFETY PRECAUTION

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

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ZINKY-23 EPOXY ZINC RICH PRIMER 85

PRODUCT DESCRIPTION	Zinky-23 Epoxy Zinc Rich Primer 85 is a two-pack, fast dry, zinc-rich epoxy primer. It is recommended where high level of corrosion resistance is required. The level of zinc dust by weight present in the dried film conforms to SSPC-Paint 20 (Level 1) and ISO 12944-5. The type of zinc dust used complies with ASTM D 520 (Type II).
INTENDED USE	It is designed as a primer for long-life protection on steel surfaces of bridges, petrochemicals, power generations, offshore facilities, port machineries and hydro facilities in highly corrosion environment.
GENERAL PROPERTIES	
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). 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. Shop Primer Surface This product is suitable for application to the unweathered steelwork freshly coated with zinc silicate shop primers. If the zinc shop primer shows extensive or widely scattered breakdown or excessive zinc corrosion, overall sweep blasting will be necessary. Other types of shop primer are not suitable for over coating and will required complete removal by abrasive blast cleaning. Weld seams and damaged areas should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). Damage Area Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). When abrasive blasting in small area is not possible, mechanical cleaning to St 3 (ISO 8501-1:2007) is acceptable. After the surface preparation, repair the damaged area using Zinky-23.



SURFACE PREPARATION	Zinky-23 Epoxy Zinc Rich Primer 85 should be applied over a surface that is dry and free from all contamination and 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 				
CONDITION DURING APPLICATION		mperature of steel surface mu	below 10°C and relative humidity ist be a minimum 3°C above dew		
APPLICATION GUIDE	Mixing Ratio	 Base:Hardener = 3.5:1 (by volume) Base and hardener should be mixed thoroughly be 			
	Pot Life	: 25°C 4 – 6 hrs			
	Theoretical Coverage	: 13.0 m²/litre at 50 μm DFT 8.1 m²/litre at 80 μm DFT			
	Thinner	: Hi-Pon Epoxy Thinner			
APPLICATION METHOD			rush and roller are recommended taken to achieve the specified dry		
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.021" : 140 – 170 kg/cm²		
	Typical Thickness	: 50 – 80 µm dry film 77 – 123 µm wet film			
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)*	: 25°C 40°C : 10 mins 6 mins : 4 hrs 3 hrs : 3 days 2 days : 4 hrs 3 hrs : 3 mths 3 mths		
	times before recoal ventilation, humidit and mechanical st	ting may be shorter or long y, underlying paint system, trength etc. A complete sy	es only. The actual drying time/ er, depending on film thickness, requirement for early handling ystem can be described on a		

NIPPON PAIN

*Consult Nippon Paint for extended requirement.

system sheet, where all parameters and special conditions could be included.



ZINKY 23 EPOXY ZINC RICH PRIMER 85

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ZINKY 23 EPOXY ZINC RICH PRIMER 85

SAFETY PRECAUTION

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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.

RECOMMENDED PAINTING	The following coating systems are recommended for Zinky-23 Epoxy Zinc Rich Primer 85:
SYSTEM	Intermediate Hi-Pon 20-04 STE 80
	• Hi-Pon 20-04 STE IM 80

- Hi-Pon 20-04 STE IM 80 •
- Hi-Pon 30-02 Epoxy MIO 80
- Hi-Pon 30-03 Epoxy Midcoat 80

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
	10L	7.8L	14L	2.2L	5L
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 reduited by the storage may reducted by the storage may re				

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 flushed with water and seek medical attention immediately • upon contact with this product.

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ZINKY-25 EPOXY ZINC PRIMER 45

PRODUCT DESCRIPTION	excellent corrosion re	Zinky-25 Epoxy Zinc Primer 45 is a two-pack epoxy zinc primer. It provides excellent corrosion resistance with hard, abrasion and weathering resistant film. The type of zinc dust used complies with ASTM D 520 (Type II).		
INTENDED USE	0 1	achinery, undergrour	tection on steel surfac d pipelines, water e	0,
GENERAL	Colour	: Grey		
PROPERTIES	Gloss Level	: Matt		
	Volume Solids, %	: 60 ± 2%		
	Specific Gravity	: 1.40 – 1.50 kg/l (N	/lixed)	
	Flash Point	: Base: 23°C	Hardener: 13°C	Mix: 23°C
	VOC	: 535 g/L (EPA Met	hod 24)	
	Typical Thickness	: 50 – 80 µm dry fil		
		83 – 133 µm wet	film	
	blast cleaned to SSF If oxidation has occ the surface should h revealed by the blas appropriate manner. <u>Shop Primer Surface</u> This product is suital with zinc silicate sho scattered breakdow necessary. Other typ	PC-SP10 with a surface period between the being the surface of the state of the sta	3501-1:2007). For opt ace profile of 50 – 75 i blasting and applicat specified visual stance should be ground, fille the unweathered stee c shop primer shows corrosion, overall swa are not suitable for or plast cleaning. Weld si SO 8501- 1:2007).	microns (2 – 3 mils). ion of this product, lard. Surface defect ed or treated in the lwork freshly coated extensive or widely eep blasting will be ver coating and will
	1:2007). When abras	sive blasting in small 2007) is acceptable	rasive blast cleaning t area is not possible, r . After the surface pre	mechanical cleaning



ZINKY-25 EPOXY ZINC PRIMER 45

SURFACE PREPARATION	Zinky-25 Epoxy Zinc Primer 45 should be applied over a surface that is dry and free from all contamination and must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.				
CONDITION DURING APPLICATION	is over 85%. The ter	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	Mixing Ratio	: Base:Hardener = 4:1 (by vo	olume)		
GUIDE		Base and hardener should	be mixed thoroughly before use.		
	Pot Life	: 25°C 6 – 8 hrs			
	Theoretical Coverage	: 12.0 m²/litre at 50 μm DFT 7.5 m²/litre at 80 μm DFT			
	Thinner	hinner : Hi-Pon Epoxy Thinner			
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry		
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.021" : 140 – 170 kg/cm²		
DETAILS	Typical Thickness	: 50 – 80 µm dry film 83 – 133 µm wet film			
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)*	: 25°C 40°C : 10 mins 6 mins : 4 hrs 3 hrs : 7 days 4 days : 8 hrs 5 hrs : 3 mths 3 mths		

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.

*Consult Nippon Paint for extended requirement.



ZINKY-25 EPOXY ZINC PRIMER 45



ZINKY-25 EPOXY ZINC PRIMER 45

SAFETY PRECAUTION

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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

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RECOMMENDED PAINTING SYSTEM

Intermediate Hi-Pon 20-04 STE 80

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- Hi-Pon 20-04 STE IM 80
- HI-PON 20-04 STE IM 80
 HI-PON 30-02 Epoxy MIO 80
- HI-FOIL 30-02 Epoxy Mill 80
- Hi-Pon 30-03 Epoxy Midcoat 80

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.

The following coating systems are recommended for Zinky-25 Epoxy Zinc Primer

PACKAGING	Unit		Base	Hardener		
		Vol	Container Size	Vol	Container Size	
	5L	4L	5L	1L	1L	
	10L	8L	14L	2L	5L	
	20L	16L	20L	4L	5L	

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 flushed with water and seek medical attention immediately upon contact with this product.				



ZINKY-26 EPOXY ZINC PRIMER 65

PRODUCT DESCRIPTION	Zinky-26 Epoxy Zinc Primer 65 is a two-pack epoxy zinc primer. It provides excellent corrosion resistance with hard, abrasion and weathering resistant film. The level of zinc dust by weight present in the dried film conforms to SSPC-Paint 20 (Level 3). The type of zinc dust used complies with ASTM D 520 (Type II).
INTENDED USE	It is designed as a primer for long-life protection on steel surfaces of bridges, tanks external, harbor machinery, underground pipelines, water equipments used in corrosive environments.
GENERAL PROPERTIES	Colour : Grey Gloss Level : Matt Volume Solids, % : 60 ± 2% Specific Gravity : 2.24 kg/l (Mixed) Flash Point : Base: 23°C Hardener: 23°C VOC : 423 g/L (EPA Method 24) Typical Thickness : 50 - 80 µm dry film 83 - 133 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). 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. Shop Primer Surface This product is suitable for application to the unweathered steelwork freshly coated with zinc silicate shop primers. If the zinc shop primer shows extensive or widely scattered breakdown or excessive zinc corrosion, overall sweep blasting will be necessary. Other types of shop primer are not suitable for over coating and will required complete removal by abrasive blast cleaning. Weld seams and damaged areas should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). Damage Area Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). When abrasive blasting in small area is not possible, mechanical cleaning to St 3 (ISO 8501-1:2007) is acceptable. After the surface preparation, repair the damaged area using Zinky-26.



ZINKY-26 EPOXY ZINC PRIMER 65

SURFACE PREPARATION	from oil & other com specified (refer to ap <u>Other Surfaces</u> The coating may be	Zinky-26 Epoxy Zinc Primer should be applied over a surface that is dry and free from oil & other contaminations. It must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.			
CONDITION DURING APPLICATION		tion when the temperature i over 85%. The temperature of it of surrounding air.			
APPLICATION	Mixing Ratio	: Base:Hardener = 3:1 (by v	olume)		
GUIDE		Base and hardener should be mixed			
	Pot Life	: 25°C 6 hrs			
	Theoretical Coverage	: 12.0 m²/litre at 50 μm DFT 7.5 m²/litre at 80 μm DFT			
	Thinner	: Hi-Pon Epoxy Thinner			
APPLICATION METHOD		ommended for application. Br Id small areas. Care must be t			
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – : 120 – 15		
	Typical Thickness	: 50 – 80 µm dry film 83 – 133 µm wet film			
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)*	: 10°C : 1 hr : 8 hrs : 14 days : 8 hrs : 3 mths	3 hrs	2 hrs
		st be considered as guidelin ting may be shorter or longe			

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.

*Consult Nippon Paint for extended requirement



ZINKY-26 EPOXY ZINC PRIMER 65



ZINKY-26 EPOXY ZINC PRIMER 65

SAFETY PRECAUTION

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

DISCLAIMER

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RECOMMENDED PAINTING SYSTEM

- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 30-02 Epoxy MIO 80
- Hi-Pon 30-03 Epoxy Midcoat 80

Topcoat

Intermediate

65:

- 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.

The following coating systems are recommended for Zinky-26 Epoxy Zinc Primer

PACKAGING	Unit	Unit Base			Hardener		
		Vol	Container Size	Vol	Container Size		
	10L	7.5L	20L	2.5L	5L		
STORAGE	STORAGE Shelf Life : Part A: 12 months (25°C) Part B: 12 months (25°C) Subject to re-inspection thereafter. Higher temperature during storage the shelf life and may lead to gelling in the tin. Frequent temperature also shorten the shelf life. Store in tightly closed container in a dry, cool and well ventilated space from sources of heat and ignition.						
					ted space, keep away		
SAFETY PRECAUTION	 This product is intended for use of professional applicators. Refer to information display on the container and in the safety data sheet (SE 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 flushed with water and seek medical attention immediately upon contact with this product.					
	 During the application, naked flame, welding operation and smo allowed. Adequate ventilation should be provided. 				n and smoking is not		

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HI-VINYL 1201 ZINC PHOSPHATE PRIMER

PRODUCT DESCRIPTION	Hi-Vinyl 1201 Zinc Phosphate Primer is a one-pack, lead and chromate free vinyl copolymer primer pigmented with zinc phosphate. It is fast drying and has excellent adhesion and corrosion protection when applied to properly prepared ferrous and non-ferrous substrates.		
INTENDED USE	It is designed for use as a primer on the exterior of steel structures exposed to moderate to severe corrosive environments.		
GENERAL PROPERTIES	Colour : Grey Gloss Level : Matt Volume Solids, % : 20 ± 2% Specific Gravity : 1.02 kg/l Flash Point : < 10°C VOC : 665 g/L (EPA Method 24) Typical Thickness : 50 - 60 µm dry film 250 - 300 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. <u>Abrasive Blast Cleaning</u> 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. <u>Other Surfaces</u> 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	Mixing: Mixed thoroughly before use with a power agitator.Theoretical: 4.0 m²/litre at 50 μm DFTCoverage3.3 m²/litre at 60 μm DFT		

NIPPON PAINT	HI-V	'INYL 1	201 ZINC PI	HOSPHATE PRIMER		
APPLICATION GUIDE	Thinner : Hi-Pon Vinyl Ester Thinner					
APPLICATION METHOD	Conventional air and 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	Airless Spray		o Size essure at Nozzle	: 0.011" – 0.018" : 140 – 170 kg/cm²		
DEIALO	Typical Thick		– 60 µm dry film 0 – 300 µm wet film	-		
			Remark Multiple spray pass to achieve 100 – 120 µm DFT			
	Drying Time	Su Th Dr	bstrate Temperature rface Dry rough Dry y to Recoat (min) y to Recoat (max)	: 25°C 40°C : 12 mins 6 mins : 55 mins 35 mins : 2.5 hrs 1 hr : 1 mth 1 mth		
	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, the 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 system is recommended for Hi-Vinyl 1201 Zinc Phosphate Primer: Topcoat • Hi-Acryl 1901 Acrylic Top Coat					
	For the choice of a coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation.					
PACKAGING	Unit	Vol	Container Size			
	20L	20L	20L			

STORAGE

Shelf Life

: 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.



HI-VINYL 1201 ZINC PHOSPHATE PRIMER

STORAGE	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 flushed with water and seek 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

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HI-PON 20-04 STE 80

PRODUCT DESCRIPTION	Hi-Pon 20-04 STE 80 is a two-pack, surface-tolerant, high solids epoxy mastic coating. It is an anti-corrosive primer and/or intermediate coating for corrosion protection of steel and other substrates in atmospheric environments.		
INTENDED USE	Universal corrosion protection for all areas in aggressive environments. It is also be over-coated with various kinds of finishing coats. Not suitable for immersed environments.		
GENERAL PROPERTIES	Colour : Grey & White Gloss Level : Low Sheen Volume Solids, % : 80 ± 2% Specific Gravity : 1.48 – 1.58 kg/l (Mixed) Flash Point : Base: 23°C Hardener: 93°C Mix: 23°C VOC : 213 g/L (EPA Method 24) Ypical Thickness : 70 – 200 μm dry film 87 – 250 μm wet film : 87 – 250 μm wet film : 100 μm dry 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. <u>Bare Steel</u> 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 or 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. <u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippor 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.		
APPLICATION GUIDE	Mixing Ratio : Base:Hardener = 6:1 (by volume) Base and hardener should be mixed thoroughly before use Induction time : 15 mins Pot Life : 25°C 2 hrs		

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Protective Coatings

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HI-PON 20-04 STE 80

APPLICATION GUIDE	Theoretical Coverage	: 11.4 m²/litre at 70 μm DFT 4.0 m²/litre at 200 μm DFT			
	Thinner	: Hi-Pon Epoxy Thinner			
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry		
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.023" : 150 – 170 kg/cm²		
	Typical Thickness	: 70 – 200 μm dry film 87 – 250 μm wet film			
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max) Dry to Recoat (max) by sel			
	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				
			consult Nippon Paint Protective chieveoptimalintercoatadhesion.		
RECOMMENDED PAINTING SYSTEM	Intermediate • Hi-Pon 20-04 S • Hi-Pon 30-02 E	TE AL 80 TE GF 80 TE IM 80 TE MIO 80 poxy MIO 80	l for Hi-Pon 20-04 STE 80:		
	Topcoat Hi-Pon 40-02 E Hi-Pon 40-04 E 				

Hi-Pon 50-01 Polyurethane Top Coat
Hi-Pon 50-03 Polyurethane Top Coat

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NIPPON PAINT	

HI-PON 20-04 STE 80

RECOMMENDED PAINTING SYSTEM				rent application, refer to the product ional recommendation.		
PACKAGING	Unit	Jnit Base		Hardener		
		Vol	Container Size	Vol	Container Size	
	19.6L	16.8L	20L	2.8L	5L	
	4.9L	4.2L	5L	0.7L	1L	
	the shelf life also shorten	-inspection t and may lea the shelf life. y closed cor	tainer in a dry, cool an	erature durir Frequent te	ng storage may reduce mperature cycles may ated space, keep away	
SAFETY PRECAUTION	 This product is intended for use of professional applicators. Refer to the safe 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 sist should immediately be removed with suitable cleanser, soap and water. Eye should be well flushed with water and seek medical attention immediate upon contact with this product. During the application, naked flame, welding operation and smoking is r allowed. Adequate ventilation should be provided. If you have any doubt regarding the suitability of use, refer to Nippon Paint further advice. 					

DISCLAIMER

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HI-PON 20-04 STE AL 80

USE fo st GENERAL C PROPERTIES G Va SI FI	or use in refineries		tanks external	
PROPERTIES G VG SI FI	iloss Level Jolume Solids, % Ipecific Gravity Iash Point OC	: Semi-gloss : 80 ± 2% : 1.53 kg/l (Mixed) : Base: 23°C Hard	lener 93°C	
		: 178 g/L (EPA Method 24 : 70 – 200 μm dry film 87 – 250 μm wet film		Mix: 23°C
PREPARATION be re Bi Ail pr (2 pr de th <u>O</u> Tř	e assessed and tre emoved in accordar lare Steel brasive blast clean erformance, blast c 2 – 3 mils). If oxidat roduct, the surface efect revealed by th he appropriate mani- other Surfaces	used on other substrates.	SO 8504. Oil or cleaning. 2007) or SSPC a surface profile the blasting and e specified visual hould be ground,	grease should be SP6. For optimum of 50 – 75 microns application of this standard. Surface filled or treated in
DURING e>		on when the temperature mperature of steel surface air.		
GUIDE Pr	lixing Ratio ot Life heoretical coverage	 Base:Hardener = 6:1 (by Base and hardener shout 25°C 2 hrs 11.4 m²/litre at 70 μm DI 4.0 m²/litre at 200 μm DI 	uld be mixed thor	oughly before use.



HI-PON 20-04 STE AL 80

APPLICATION GUIDE	Thinner	: Hi-Pon Epoxy Thinner				
APPLICATION METHOD			sh and roller are recommended ken to achieve the specified dry			
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.017" – 0.031" : 150 – 200 kg/cm²			
	Typical Thickness	: 70 – 200 μm dry film 87–250 μm wet film				
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max) Dry to Recoat (max) by self*	: 25°C 40°C : 4 hrs 2 hrs : 10 hrs 4 hrs : 7 days 2 days : 10 hrs 4 hrs : 7 days 3 days : 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 Coatingsfor recommended surface preparation to achieve optimal intercoat adhesion.					
RECOMMENDED PAINTING SYSTEM	Intermediate • Hi-Pon 20-04 S [*] • Hi-Pon 20-04 S [*] • Hi-Pon 20-04 S [*] • Hi-Pon 20-04 S [*] • Hi-Pon 30-02 Eg • Hi-Pon 30-03 Eg Topcoat • Hi-Pon 40-02 Eg • Hi-Pon 40-02 Eg • Hi-Pon 40-04 Eg • Hi-Pon 50-01 Po	TE AL 80 TE GF 80 TE IM 80 TE MIO 80 poxy MIO 80 poxy Midcoat 80	or Hi-Pon 20-04 STE AL 80:			



PAINTING

RECOMMENDED

HI-PON 20-04 STE AL 80

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			
	19.6L	16.8L	20L	2.8L	5L			
	4.9L	4.2L	5L	0.7L	1L			
STORAGE	Shelf Life		art A: 12 months (25°C art B: 12 months (25°C					
	the shelf life	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 tight from sources		tainer in a dry, cool ar ignition.	ıd well ventil	ated space, keep av			
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 skir should immediately be removed with suitable cleanser, soap and water. 							
		 Eye should be well flushed with water and seek 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 ha further a 		t regarding the suitabi	lity of use, re	efer to Nippon Paint			

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HI-PON 20-04 STE GF 80

PRODUCT DESCRIPTION	Hi-Pon 20-04 STE GF 80 is a two-pack, surface-tolerant, high solids epoxy mastic coating pigmented with glass flakes. It is an anti-corrosive primer and/ or intermediate coating for corrosion protection of steel and other substrates in atmospheric and immersed environments.				
INTENDED USE	Universal corrosion protection for all areas in aggressive environments. It is designed for use in refineries, power plants, bridges, tanks external and for structural steelwork in atmospheric and immersed environments.				
GENERAL PROPERTIES	Colour : Grey, Off White Gloss Level : Semi-gloss Volume Solids, % : 80 ± 2% Specific Gravity : 1.82 kg/l (Mixed) Flash Point : Base: 23°C Hardener: 93°C Mix: 23°C VOC : 178 g/L (EPA Method 24) Typical Thickness : 125 – 250 µm dry film 156 – 313 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. <u>Abrasive Blast Cleaning</u> 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. <u>Other Surfaces</u> 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.				
APPLICATION GUIDE	Mixing Ratio : Base:Hardener = 6:1 (by volume) Base and hardener should be mixed thoroughly before use. Pot Life : 25°C 2 hrs				

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Protective Coatings

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HI-PON 20-04 STE GF 80

oretical verage nner ess spray is recon stripe coating and film thickness. ess Spray	d small areas. Care must be	ush and roller are recommended e taken to achieve the specified			
stripe coating and film thickness.	d small areas. Care must be	e taken to achieve the specified			
ess Spray					
	Pressure at Nozzle	: 0.019" – 0.035" : 150 – 200 kg/cm²			
Filters should be removed from spray equipment prior to spraying because of glass flake					
ical Thickness	: 125 – 250 μm dry film 156 – 313 μm wet film	Jidos liake			
ing Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max) Dry to Recoat (max) by se	: 25°C 40°C : 7 hrs 2 hrs : 10 hrs 4 hrs : 7 days 3 days : 10 hrs 4 hrs : 7 days 3 days : 17 days 3 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.					
*Where an "extended" overcoating time is stated, consult Nippon Paint Protective Coatings for recommended surface preparation to achieve optimal intercoat adhesion.					
rmediate Hi-Pon 20-04 ST Hi-Pon 20-04 ST Hi-Pon 20-04 ST Hi-Pon 20-04 ST Hi-Pon 20-04 ST Hi-Pon 30-02 Ep Hi-Pon 30-03 Ep coat	E 80 E AL 80 E GF 80 E IM 80 E MIO 80 oxy MIO 80 oxy Midcoat 80	I for Hi-Pon 20-04 STE GF 80:			
	given data must se before recoatii tilation, humidity, chanical strength ore all parameters rere an "extended titings for recomi esion. following coating rmediate Hi-Pon 20-04 ST Hi-Pon 20-04 ST Hi-Pon 20-04 ST Hi-Pon 20-04 ST Hi-Pon 30-02 Ep Hi-Pon 30-03 Ep Hi-Pon 40-02 Ep	ing Time : Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max) Dry to Recoat (max) Dry to Recoat (max) by se given data must be considered as guideline as before recoating may be shorter or longe tilation, humidity, underlying paint system, rec chanical strength etc. A complete system can l are all parameters and special conditions coul here an "extended" overcoating time is stated, tings for recommended surface preparatio esion. following coating systems are recommended Hi-Pon 20-04 STE 80 Hi-Pon 20-04 STE AL 80 Hi-Pon 20-04 STE GF 80 Hi-Pon 20-04 STE IM 80 Hi-Pon 30-02 Epoxy MIO 80 Hi-Pon 30-03 Epoxy Midcoat 80			



HI-PON 20-04 STE GF 80

RECOMMENDED PAINTING SYSTEM	 Hi-Pon 4 Hi-Pon 5 Hi-Pon 5 For the choi 	60-03 Polyure	Top Coat thane Top Coat thane Top Coat		n, refer to the product ndation.
PACKAGING	Unit		Base		Hardener
		Vol	Container Size	Vol	Container Size
	19.6L	16.8L	20L	2.8L	5L
	4.9L	4.2L	5L	0.7L	1L
	the shelf life also shorten Store in tight	and may lea the shelf life. ly closed con	d to gelling in the tin	. Frequent te	ng storage may reduce emperature cycles may ated space, keep away
SAFETY PRECAUTION	 from sources of heat and ignition. This product is intended for use of professional applicators. Refer to the safe 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 sk should immediately be removed with suitable cleanser, soap and water. Eye should be well flushed with water and seek medical attention immediate upon contact with this product. During the application, naked flame, welding operation and smoking is n allowed. Adequate ventilation should be provided. If you have any doubt regarding the suitability of use, refer to Nippon Paint further advice. 				

DISCLAIMER

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HI-PON 20-04 STE IM 80

PRODUCT DESCRIPTION	coating. It is an an	M 80 is a two-pack, surface-tolerant, high solids epoxy mastic ti-corrosive primer and/or intermediate coating for corrosion ad other substrates in atmospheric and immersed environments.
INTENDED USE	for use in refineries	protection for all areas in aggressive environments. It is designed s, power plants, bridges, tanks external and for structural heric and immersed environments, including portable water.
GENERAL PROPERTIES	Colour Gloss Level Volume Solids, % Specific Gravity Flash Point VOC Typical Thickness	: Grey & Off-White : Semi-gloss : 80 ± 2% : 1.78 kg/l (Mixed) : Base: 23°C Hardener: 96°C Mix: 23°C : 214 g/L (EPA Method 24) : 70 – 200 μm dry film 87 – 250 μm wet film
SURFACE PREPARATION	be assessed and tr removed in accorda Abrasive Blast Clea Abrasive blast clear performance, blast of (2 – 3 mils). If oxida this product, the su Surface defect reve treated in the appro Other Surfaces	hing to Sa 2 ¹ / ₂ (ISO 8501-1:2007) or SSPC-SP6. For optimum cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns ation has occurred between the blasting and application of irface should be re-blasted to the specified visual standard. aled by the blast cleaning process should be ground, filled or priate manner.
CONDITION DURING APPLICATION		tion when the temperature is below 10°C or relative humidity temperature of steel surface must be a minimum 3°C above nding air.
APPLICATION GUIDE	Mixing Ratio Pot Life Theoretical Coverage	 Base:Hardener = 6:1 (by volume) Base and hardener should be mixed thorough before use. 25°C 2 hrs 11.4 m²/litre at 70 μm DFT 4.0 m²/litre at 200 μm DFT



HI-PON 20-04 STE IM 80

APPLICATION GUIDE	Thinner	: Hi-Pon Epoxy Thinner	
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.023" : 150 – 170 kg/cm²
	Typical Thickness	: 70 – 200 μm dry film 87 – 250 μm wet film	
	times before recoat ventilation, humidity mechanical strength where all parameters *Where an "extended	ing may be shorter or longe , underlying paint system, red etc. A complete system can s and special conditions cou d" overcoating time is stated,	es only. The actual drying time/ rr, depending on film thickness, quirement for early handling and be described on a system sheet,
RECOMMENDED PAINTING SYSTEM	Intermediate Hi-Pon 20-04 S Hi-Pon 20-04 S Hi-Pon 20-04 S Hi-Pon 20-04 S Hi-Pon 30-02 E Hi-Pon 30-03 E Topcoat Hi-Pon 40-02 E Hi-Pon 40-04 E Hi-Pon 50-01 PA	TE 80 TE AL 80 TE GF 80 TE IM 80 TE MIO 80 poxy MIO 80 poxy Midcoat 80	d for Hi-Pon 20-04 STE IM 80:



HI-PON 20-04 STE IM 80

PACKAGING	Unit		Base	Hardener		
		Vol	Container Size	Vol	Container Size	
	19.6L	16.8L	20L	2.8L	5L	
	4.9L	4.2L	5L	0.7L	1L	
STORAGE	Shelf Life		art A: 12 months (25°C) art B: 12 months (25°C)			
		and may lea	hereafter. Higher temp ad to gelling in the tin.			
	Store in tight from sources		ntainer in a dry, cool an ignition.	d well ventila	ated space, keep av	
SAFETY PRECAUTION	informat		ded for use of profession the container and in			
			rell-ventilated area, avo be removed with suitab			
		uld be well fl ntact with th	ushed with water and s is product.	eek medica	l attention immediat	
			on, naked flame, weld entilation should be pro		n and smoking is	
	 If you had 				fer to Nippon Paint	

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HI-PON 20-04 STE MIO 80

PRODUCT DESCRIPTION	coating pigmented or intermediate coa	MIO 80 is a two-pack, surface-tolerant, high solids epoxy mastic with micaceous iron oxide. It is an anti-corrosive primer and/ ating for corrosion protection of steel and other substrates in imersed environments.
INTENDED USE	designed for use	n protection for all areas in aggressive environments. It is in refineries, power plants, bridges, tanks external and for k in atmospheric and immersed environments.
GENERAL PROPERTIES	Colour Gloss Level Volume Solids, % Specific Gravity Flash Point VOC Typical Thickness	: Grey : Semi-gloss : 80 ± 2% : 1.58 kg/l (Mixed) : Base: 23°C Hardener: 93°C Mix: 23°C : 168 g/L (EPA Method 24) : 70 – 200 μm dry film 87 – 250 μm wet film
SURFACE PREPARATION	be assessed and the removed in accords Abrasive Blast Clea Abrasive blast clea performance, blast (2 - 3 mils). If oxid this product, the su Surface defect reve treated in the approx Other Surfaces	uning to Sa 2 ¹ / ₂ (ISO 8501-1:2007) or SSPC-SP6. For optimum cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns lation has occurred between the blasting and application of urface should be re-blasted to the specified visual standard. ealed by the blast cleaning process should be ground, filled or opriate manner.
CONDITION DURING APPLICATION		ation when the temperature is below 10°C or relative humidity temperature of steel surface must be a minimum 3°C above anding air.
APPLICATION GUIDE	Mixing Ratio Pot Life Theoretical Coverage	 Base:Hardener = 6:1 (by volume) Base and hardener should be mixed thoroughly before use. 25°C 2 hrs 11.4 m²/litre at 70 μm DFT 4.0 m²/litre at 200 μm DFT

Protective Coatings

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HI-PON 20-04 STE MIO 80

APPLICATION GUIDE	Thinner	: Hi-Pon Epoxy Thinner	
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.017" – 0.031" : 150 – 200 kg/cm²
	Typical Thickness	: 70 – 200 μm dry film 87–250 μm wet film	
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max) Dry to Recoat (max) by se	: 25°C 40°C : 4 hrs 2 hrs : 10 hrs 4 hrs : 7 days 2 days : 10 hrs 4 hrs : 7 days 3 days If* : Extended
	times before recoat ventilation, humidity mechanical strength where all parameter *Where an "extende	ing may be shorter or longe , underlying paint system, red etc. A complete system can s and special conditions cou d" overcoating time is stated,	es only. The actual drying time/ r, depending on film thickness, quirement for early handling and be described on a system sheet, Id be included. consult Nippon Paint Protective n to achieve optimal intercoat
RECOMMENDED PAINTING SYSTEM	Intermediate • Hi-Pon 20-04 S • Hi-Pon 20-04 S • Hi-Pon 20-04 S • Hi-Pon 20-04 S • Hi-Pon 30-02 E • Hi-Pon 30-03 E	TE 80 TE AL 80 TE GF 80 TE IM 80 TE MIO 80	for Hi-Pon 20-04 STE MIO 80:



RECOMMENDED PAINTING SYSTEM			g system for different on Paint for profession		
PACKAGING	Unit		Base		Hardener
		Vol	Container Size	Vol	Container Size
	19.6L	16.8L	20L	2.8L	5L
	4.9L	4.2L	5L	0.7L	1L
	Store in tight		itainer in a dry, cool an ignition.	d well ventil	ated space, keep awa
SAFETY PRECAUTION	informati	ion display o	led for use of profession the container and in		
	Use this		ell-ventilated area, avo e removed with suitab		
		uld be well fluntact with thi	ushed with water and s s product.	seek medica	l attention immediate
			on, naked flame, weld entilation should be pro		on and smoking is no
	16 1		t regarding the suitabil		

DISCLAIMER

NIPPON PAIN

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HI-PON 20-14 EPOXY U-COAT

PRODUCT DESCRIPTION	Hi-Pon 20-14 Epoxy U-Coat is a two-pack, high solids epoxy which can be used as primer or finish coat.
INTENDED USE	As a primer or finishing coat for steel structures on its own or in combination with various systems. Provides corrosion protection for up to C4 environment. A top coat should be used for cosmetic finish.
GENERAL PROPERTIES	Colour : Grey Gloss Level : Semi-gloss
	Volume Solids, $\%$: 73 ± 2%
	Specific Gravity : 1.22-1.32 kg/l (Mixed)
	Flash Point : Base: 23°C Hardener: 13.3°C Mix: 13.3°C
	VOC : 173 g/L (EPA Method 24)
	Typical Thickness : 100 – 200 μm dry film
	140 – 280 µm wet film
	removed in accordance with SSPC-SP1 solvent cleaning. <u>Abrasive Blast Cleaning</u> 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. <u>Shop Primer Surface</u> This product is suitable for application to the unweathered steelwork freshly coated with approved shop primers. Other types of shop primer are not suitable for over coating and will required complete removal by abrasive blast cleaning. Weld seams and damaged areas should be blast cleaned to Sa 2½ (ISO 8501- 11:2007) or SSPC-SP6, to achieve surface profile 50 – 75 μm. <u>Damaged Area</u> 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.



HI-PON 20-14 EPOXY U-COAT

CONDITION DURING APPLICATION		emperature of steel surface m	below 10°C or relative humidity ust be minimum 3°C above dew
APPLICATION GUIDE	Mixing Ratio	: Base:Hardener = 2.2:1 (by Base and hardener should	volume) be mixed thoroughly before use.
GOIDE	Pot Life	: 25°C 1.5 hrs	
	Theoretical Coverage	: 7.3 m²/litre at 100 μm DFT 3.6 m²/litre at 200 μm DFT	
	Thinner	: Hi-Pon Epoxy Thinner	
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.017" – 0.031" : >200 kg/cm²
	Typical Thickness	: 100 – 200 μm dry film 140 – 280 μm wet film	
	Drying Time	: Substrate Temperature Surface Dry	: 25°C 40°C : 2 hrs 1.5 hrs
		Through Dry Cured	:3.5 hrs 3 hrs :7 days 4 days
		Dry to Recoat (min)	: 3.5 hrs 3 hrs
		Dry to Recoat (max)	: 7 days 4 days
	times before recoa ventilation, humidit mechanical strengt	ting may be shorter or longe y, underlying paint system, rec	es only. The actual drying time/ r, depending on film thickness, quirement for early handling and be described on a system sheet, Id be included.
RECOMMENDED	The following Topc	oats are recommended for Hi-	Pon 20-14 Epoxy U-Coat:
PAINTING SYSTEM	 Hi-Pon 40-04 E Hi-Pon 50-01 F 	poxy Top Coat poxy Top Coat Polyurethane Top Coat Polyurethane Top Coat	
		coating system for different a t Nippon Paint for professiona	pplication, refer to the product al recommendation.



HI-PON 20-14 EPOXY U-COAT

PACKAGING	Unit		Base Hardene		Hardener
		Vol	Container Size	Vol	Container Size
	4.8L	3.3L	5L	1.5L	5L
	14.5L	10.0L	20L	4.5L	5L
STORAGE	Shelf Life		art A: 12 months (25°C art B: 12 months (25°C		
	the shelf life		hereafter. Higher temp d to gelling in the tin.		
	Store in tight from sources		itainer in a dry, cool an ignition.	id well ventila	ited space, keep awa
SAFETY PRECAUTION	informat		led for use of profession n the container and in		
			ell-ventilated area, avo e removed with suitab		
		uld be well flu ntact with this	ushed with water and s s product.	seek medical	attention immediate
			on, naked flame, weld entilation should be pro		n and smoking is no
	 If you had further a 		t regarding the suitabi	lity of use, re	fer to Nippon Paint fo

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HI-PON 30-02 EPOXY MIO 80

PRODUCT DESCRIPTION	Hi-Pon 30-02 Epoxy MIO 80 is a two-pack, high solids, fast dry epoxy coating pigmented with micaceous iron oxide. It provides a high build impervious 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 : Grey Gloss Level : Matt Volume Solids, % : 80 ± 2% Specific Gravity : 1.85 - 1.95 kg/l (Mixed) Flash Point : Base: 23°C Hardener: 23°C VOC : 200 g/L (EPA Method 24) Typical Thicknes : 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 30-02 Epoxy MIO 80. Hi-Pon 30-02 Epoxy MIO 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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Protective Coatings



APPLICATION

APPLICATION

APPLICATION

RECOMMENDED

PAINTING

SYSTEM

80

METHOD

DETAILS

GUIDE

Mixing Ratio

Pot Life

Theoretical

film thickness.

Airless Spray

Drying Time

adhesion.

MIO 80:

Primer .

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Coverage

Thinner

HI-PON 30-02 EPOXY MIO 80

Base and hardener should be mixed thoroughly before use.

: 0.017" - 0.031"

: 25°C

: 180 - 200 kg/cm²

: 1.5 hrs 0.5 hrs

: 7 days 3 days

: 3.5 hrs 1 hr

: 3.5 hrs 1 hr

: Extended

40°C

: Base:Hardener = 2.6:1 (by volume)

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

: 10.0 m²/litre at 80 µm DFT 4.0 m²/litre at 200 µm DFT

: Hi-Pon Epoxy Thinner

Pressure at Nozzle

100 – 250 µm wet film

: Substrate Temperature

Dry to Recoat (min)

Dry to Recoat (max)*

where all parameters and special conditions could be included.

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 an "extended" overcoating time is stated, consult Nippon Paint Protective

Coatings for recommended surface preparation to achieve optimal intercoat

The following coating systems are recommended for Hi-Pon 30-02 Epoxy

Surface Drv

Through Dry

Cured

: 25°C 1.5 hrs

: Tip Size

Typical Thickness : 80 – 200 µm dry film



SAFETY

PRECAUTION

HI-PON 30-02 EPOXY MIO 80

RECOMMENDED PAINTING SYSTEM	 Hi-Pon 2 Hi-Pon 2 Topcoat Hi-Pon 4 Hi-Pon 4 Hi-Pon 5 Hi-Pon 5 For the choi	20-10 Epoxy 10-02 Epoxy 10-04 Epoxy 50-01 Polyure 50-03 Polyure ce of coating	Zinc Phosphate 70 Zinc Phosphate 63 Top Coat Top Coat thane Top Coat thane Top Coat		, refer to the product
PACKAGING	Unit		Base		Hardener
		Vol	Container Size	Vol	Container Size
	17L	12.3L	20L	4.7L	5L
STORAGE		Pa -inspection tl and may lea) erature durir	ng storage may reduce mperature cycles may

Store in tightly closed container in a dry, cool and well ventilated space, keep away from sources of heat and ignition.

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 flushed with water and seek 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.

- ate 70 ate 63
- oat
- oat

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Zinky-12 Inorganic Zinc Rich Primer 77

Zinky-13 Inorganic Zinc Rich Primer 85

Hi-Pon 20-03 Epoxy Red Oxide Primer

Zinky-21 Epoxy Zinc Rich Primer 77

Zinky-22 Epoxy Zinc Rich Primer 80

Hi-Pon 20-01 Epoxy Primer

Hi-Pon 20-04 STE 80



HI-PON 30-02 EPOXY MIO 80



HI-PON 30-03 EPOXY MIDCOAT 80

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PRODUCT DESCRIPTION	Hi-Pon 30-03 Epoxy Midcoat 80 is a two-pack, high solids, fast dry epoxy coat It provides a high build barrier coating that gives excellent adhesion, surface wet properties and anti-corrosive properties.		
INTENDED USE	severe corrosive er	or bridges, tanks external and other steel structures used in wironments, or pipelines, equipments, machinery and steel cal factory and power plant.	
GENERAL PROPERTIES	Colour Gloss Level Volume Solids, % Specific Gravity Flash Point VOC Typical Thickness	: White, Grey : Matt : 80 ± 2% : 1.70 – 1.80 kg/l (Mixed) depending on colours : Base: 23°C Hardener: 23°C Mix: 23°C : 208 g/L (EPA Method 24) : 80 – 200 μm dry film	
		100 – 250 μm wet film	
SURFACE PREPARATION	be assessed and tr removed in accorda Hi-Pon 30-03 Epox anti-corrosive coati dry and free from overcoating interval <u>Other Surfaces</u> The coating may	be clean, dry and free from contamination. The surface should eated in accordance with ISO 8504. Oil or grease should be ince with SSPC-SP1 solvent cleaning. y Midcoat 80 should always be applied over a recommended ng scheme for metal surface. The primer surface should be oil and other contaminations. It must be applied within the s specified (refer to application section for details). be used on other substrates. Please contact your local for more information.	
CONDITION DURING APPLICATION		tion when the temperature is below 10°C or relative humidity temperature of steel surface must be a minimum 3°C above nding air.	
APPLICATION GUIDE	Mixing Ratio Pot Life Theoretical Coverage	 Base:Hardener = 3:1 (by volume) Base and hardener should be mixed thoroughly before use. 25°C 1.5 hrs 10.0 m²/litre at 80 μm DFT 4.0 m²/litre at 200 μm DFT 	
	Thinner	: Hi-Pon Epoxy Thinner	



HI-PON 30-03 EPOXY MIDCOAT 80

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PON PAINT	

HI-PON 30-03 EPOXY MIDCOAT 80

PACKAGING	Unit		Base	ŀ	lardener
		Vol	Container Size	Vol	Container Size
	17L	12.7L	20L	4.3L	5L
STORAGE		Pa -inspection t and may lea) perature during	g storage may reduce nperature cycles may
	Store in tightl from sources			nd well ventila	ted space, keep away
SAFETY PRECAUTION	informati using the	on display o product.	n the container and in	the safety da	ors. Refer to the safety ta sheet (SDS) before
			ell-ventilated area, avo e removed with suitab		ct, spillage on the skin oap and water.
	,	uld be well flu ntact with thi		seek medical	attention immediately
	0		on, naked flame, weld entilation should be pro	0 1	n and smoking is not
	 If you ha further a 		t regarding the suitabi	lity of use, ref	er to Nippon Paint for

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APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.017" – 0.031" : 180 – 200 kg/cm²
	Typical Thickness	: 80 – 200 μm dry film 100 – 250 μm wet film	
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)*	: 25°C 40°C : 1.5 hrs 0.5 hrs : 3.5 hrs 1 hr : 7 days 3 days : 3.5 hrs 1 hr : Extended
	times before recoat ventilation, humidity mechanical strength	ing may be shorter or longe , underlying paint system, rea	es only. The actual drying time/ r, depending on film thickness, quirement for early handling and be described on a system sheet, Id be included.
			consult Nippon Paint Protective n to achieve optimal intercoat
RECOMMENDED PAINTING SYSTEM	Midcoat 80: Primer · Zinky-12 Inorga · Zinky-13 Inorga · Zinky-21 Epoxy · Zinky-22 Epoxy · Hi-Pon 20-01 E · Hi-Pon 20-04 S · Hi-Pon 20-04 S · Hi-Pon 20-04 S · Hi-Pon 20-07 E · Hi-Pon 20-10 E Topcoat · Hi-Pon 40-02 E	nic Zinc Rich Primer 77 nic Zinc Rich Primer 85 Zinc Rich Primer 77 Zinc Rich Primer 80 poxy Red Oxide Primer TE 80 TE IM 80 poxy Zinc Phosphate 70 poxy Zinc Phosphate 63 poxy Top Coat	nded for Hi-Pon 30-03 Epoxy
	 Hi-Pon 40-04 E Hi-Pon 50-01 P Hi-Pon 50-03 P 		

For the choice of coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation.



HI-PON 30-04 EPOXY MI0 70

PRODUCT DESCRIPTION	Hi-Pon 30-04 Epoxy MIO 70 is a two-pack polyamide cured epoxy coating containing Micaceous Iron Oxide pigment. It is specially formulated to give high order of protection for steel structure against corrosion. If it is to be applied over steel surface, it is preferable to be used in combination with the primers as recommended.
INTENDED USE	As a middle coat for bridges, tanks external and other steel structures used in corrosive environments, or pipelines, equipments, machinery and steel structures in chemical factory and power plant.
GENERAL PROPERTIES	
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. Damage 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 30-04 Epoxy MIO 70. Hi-Pon 30-04 Epoxy MIO 70 should always be applied over a recommended anticorrosive coating scheme for metal surface. The primer surface should be dry and free from all contamination and Hi-Pon 30-04 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 and relative humidity is over 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air.



HI-PON 30-04 EPOXY MI0 70

APPLICATION GUIDE	Mixing Ratio	: Base:Hardener = 4:1 (by v Base and hardener should	olume) I be mixed thoroughly before use.			
	Pot Life	: 25°C 6 hrs				
	Theoretical Coverage					
	Thinner	: Hi-Pon Epoxy Thinner				
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry			
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.017" – 0.031" : 140 – 170 kg/cm²			
	Typical Thickness	: 50 – 100 μm dry film 70 – 145 μm wet film				
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)*	: 25°C 40°C : 3 hrs 2 hrs : 16 hrs 10 hrs : 7 days 4 days : 16 hrs 10 hrs : Extended			
	times before recoat ventilation, humidity mechanical strength	ing may be shorter or longe , underlying paint system, re	es only. The actual drying time er, depending on film thickness quirement for early handling and be described on a system sheet Id be included.			
			consult Nippon Paint Protective n to achieve optimal intercoa			
		nediate/Topcoats are recomn	nended for Hi-Pon 30-04:			
SYSTEM	 Zinky-13 Inorga Zinky-21 Epoxy Zinky-22 Epoxy Hi-Pon 20-01 E Hi-Pon 20-03 E Hi-Pon 20-04 S Hi-Pon 20-04 S Hi-Pon 20-07 E 	poxy Red Oxide Primer TE 80				





SYSTEM	Hi-Pon 5 Hi-Pon 5 Hi-Pon 5 Hi-Floro For the choi	50-03 Polyur 6738 Fluoro ce of coatin	ethane Top Coat ethane Top Coat carbon Top Coat		n, refer to the product
PACKAGING	Unit		Base		Hardener
		Vol	Container Size	Vol	Container Size
	5L	4L	5L	1L	1L
	20L	16L	20L	4L	5L
STORAGE		-inspection t and may lea	d to gelling in the tin.	erature durir	ng storage may reduce mperature cycles may
	Subject to re the shelf life also shorten Store in tight from sources	-inspection t and may lea the shelf life. ly closed cor of heat and	hereafter. Higher temp Id to gelling in the tin. Itainer in a dry, cool an ignition.	erature durir Frequent te d well ventila	mperature cycles may ated space, keep away
STORAGE SAFETY PRECAUTION	Subject to re the shelf life also shorten Store in tight from sources	-inspection t and may lea the shelf life. ly closed cor of heat and duct is intend	hereafter. Higher temp Id to gelling in the tin. Itainer in a dry, cool an ignition.	erature durir Frequent te d well ventila	mperature cycles may
SAFETY	Subject to re the shelf life also shorten Store in tight from sources • This pro- informat using the • Use this	-inspection t and may lea the shelf life. ly closed cor of heat and duct is intencion display o e product. product in w	hereafter. Higher temp d to gelling in the tin. tainer in a dry, cool an ignition. ded for use of profession n the container and in	erature durir Frequent te d well ventila onal applicat the safety d id skin conta	ated space, keep away ors. Refer to the safety ata sheet (SDS) before act, spillage on the skin
SAFETY	Subject to re the shelf life also shorten Store in tight from sources • This pro- informat using the • Use this should in • Eye shou	-inspection t and may lea the shelf life. ly closed cor of heat and duct is intencion display o e product. product in w mmediately b	hereafter. Higher temp d to gelling in the tin. tainer in a dry, cool an ignition. ded for use of profession n the container and in ell-ventilated area, avo e removed with suitab	erature durir Frequent te d well ventik onal applicat the safety d id skin conta le cleanser, s	ated space, keep away ors. Refer to the safety ata sheet (SDS) before act, spillage on the skin
SAFETY	Subject to re the shelf life also shorten Store in tight from sources • This pro- informat using the • Use this should ir • Eye shou upon coi • During t	-inspection t and may lea the shelf life. ly closed cor of heat and duct is intencion display o e product. product in w nmediately b uld be well flintact with thi he applicatic	hereafter. Higher temp Id to gelling in the tin. Itainer in a dry, cool an ignition. ded for use of profession n the container and in ell-ventilated area, avor e removed with suitab ushed with water and a s product.	erature durir Frequent te d well ventik onal applicat the safety d id skin conta le cleanser, s seek medica	ated space, keep away ors. Refer to the safety ata sheet (SDS) before act, spillage on the skin soap and water.

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PRODUCT DESCRIPTION	Hi-Pon 80-05 Epoxy TL 70 is a two-pack epoxy tank lining for potable water.
INTENDED USE	It is designed as a self-priming high build finish for internal lining of potable water storage tank. It can also be used as a long-term corrosion protection lining o storage tank for selective palm oil derivatives & vegetable oil with FDA 21 CFF Part 175.300 compliance and BS 6920 potable water at 60°C approval.
GENERAL PROPERTIES	Colour: White, GreyGloss Level: Semi-glossVolume Solids, %: 70 ± 2%Specific Gravity: 1.77 kg/l (Mixed)Flash Point: Base: 23°CHardener: 31°CVOC: 260 g/L (EPA Method 24)Typical Thickness: 100 – 150 µm dry film 143 – 215 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. Stripe coat is required on all weld lines. Abrasive Blast Cleaning Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). For optimum performance blast cleaned to SSPC-SP1 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 minimum Sa 2½ (ISO 8501-1:2007). After the surface preparation repair the damaged area using Hi-Pon 80-05. Hi-Pon 80-05 Epoxy TL 70 should be applied over a surface that is dry and free from dirt, grease, oil and other contaminants and must be applied within the overcoating intervals specified (refer to application section for details).
	Other Surfaces

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Protective Coatings

HI-PON 80-05 EPOXY TL 70



HI-PON 80-05 EPOXY TL 70



HI-PON 80-05 EPOXY TL 70

CONDITION DURING APPLICATION	is over 85%. The	temperature of steel surface	below 10°C and relative humidity must be a minimum 3°C above tillation to have air movement to
APPLICATION	Mixing Ratio	: Base:Hardener = 4.56:1 (b	by volume)
GUIDE		Base and hardener should	be mixed thoroughly before use.
	Pot Life	: 25°C 1 hr	
	Theoretical Coverage	: 7.0 m²/litre at 100 µm DFT 4.7 m²/litre at 150 µm DFT	
	Thinner	: Hi-Pon Epoxy Thinner	
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.018" – 0.026" : 140 – 170 kg/cm²
	Typical Thickness	s :100 – 150 μm dry film 143 – 215 μm wet film	
	Drying Time	: Substrate Temperature	: 25°C 40°C
		Surface Dry	: 2 hrs 1 hr
		Through Dry Cured	:5 hrs 3 hrs :7 days 4 days
		Dry to Recoat (min)	:7 days 4 days :5 hrs 3 hrs
		Dry to Recoat (max)	: 2 mths 1 mth
	Pin hole detection	n is required to ensure a pin	hole free system.
	times before recoa ventilation, humidit mechanical streng	ating may be shorter or longe ty, underlying paint system, re	es only. The actual drying time/ er, depending on film thickness, quirement for early handling and be described on a system sheet, Id be included.
RECOMMENDED	The following coati	ing systems are recommended	d for Hi-Pon 80-05 Epoxy TL 70:
PAINTING SYSTEM		Epoxy Red Oxide Primer Epoxy White primer	
		coating system for different a t Nippon Paint for profession	application, refer to the product al recommendation.

PACKAGING	Unit		Base		Hardener
		Vol	Container Size	Vol	Container Size
	20L	16.4L	20L	3.6L	5L
TORAGE	Shelf Life		art A: 12 months (25°C art B: 12 months (25°C		
		and may lea	hereafter. Higher temp d to gelling in the tin		
	Store in tight from sources		tainer in a dry, cool ar ignition.	nd well ventila	ated space, keep awa
AFETY RECAUTION	informati		led for use of professi n the container and in		
		•	ell-ventilated area, avo e removed with suitab		
		uld be well flu ntact with thi	ushed with water and s product.	seek medica	I attention immediate
	0		on, naked flame, weld entilation should be pre	0 1	n and smoking is no

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HI-PON 90-01 EPOXY GLASS FLAKE HB 95

PRODUCT DESCRIPTION	build epoxy coating	y Glass Flake HB 95 is a two-pack, low VOC, high solids, high g, reinforced with glass flakes. It provides excellent corrosion good abrasion resistance. Suitable for seawater immersion.
INTENDED USE	structures, refinerie	use in highly corrosive environments, such as offshore s, power plants, bridges, chemical plants, tanks external and work in atmospheric and immersed environments.
GENERAL PROPERTIES	Colour Gloss Level Volume Solids, % Specific Gravity Flash Point VOC Typical Thickness	: Grey, White : Gloss : 95 ± 3% : 1.44 kg/l (Mixed) : Base: 13.3°C Hardener: 93°C Mix: 13.3°C : 42 g/L (EPA Method 24) : 300 – 625 μm dry film 316 – 658 μm wet film
SURFACE PREPARATION	be assessed and tr removed in accorda Abrasive Blast Clea Abrasive blast clea performance, blast (2 – 3 mils). If oxid this product, the su Surface defect reve treated in the appro-	ning to Sa $2\frac{1}{2}$ (ISO 8501-1:2007) or SSPC-SP6. For optimum cleaned to SSPC-SP10 with a surface profile of $50 - 75$ microns ation has occurred between the blasting and application of urface should be re-blasted to the specified visual standard. ealed by the blast cleaning process should be ground, filled or opriate manner.
CONDITION DURING APPLICATION		tion when the temperature is below 10°C or relative humidity mperature of steel surface must be a minimum 3°C above dew g air.
APPLICATION GUIDE	Mixing Ratio Pot Life	 Base:Hardener = 2:1 (by volume) Base and hardener should be mixed thoroughly before use. 25°C 50 mins



APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.021" – 0.035" : >200 kg/cm²			
		Filters should be remove from spray equipment pric to spraying because of glass flake				
	Typical Thicknes	s : 300 – 625 μm dry film 316 – 658 μm wet film				
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)	: 25°C 40°C : 4.5 hrs 2 hrs : 10 hrs 4 hrs : 7 days 3 days : 10 hrs 4 hrs : 7 days 3 days			
	times before reco ventilation, humid mechanical streng	ating may be shorter or long ity, underlying paint system, re	tes only. The actual drying time er, depending on film thickness equirement for early handling an be described on a system shee uld be included.			
RECOMMENDED PAINTING SYSTEM	The following coa Flake HB 95:	ting systems are recommende	ed for Hi-Pon 90-01 Epoxy Glas			
			el; however, it can also be applie			
	Hi-Pon 90-01 is no over the following Shop Primer		al; however, it can also be applie			
	Hi-Pon 90-01 is no over the following Shop Primer • Zinky-10 Inor Primer • Zinky-13 Inor • Zinky-22 Epo • Hi-Pon 20-04	primers. ganic Zinc Shop Primer ganic Zinc Rich Primer 85 (mis xy Zinc Rich Primer 80				

NIPPON PAINT

GUIDE

APPLICATION

APPLICATION

METHOD



HI-PON 90-01 EPOXY GLASS FLAKE HB 95

RECOMMENDED PAINTING SYSTEM	Hi-Pon 5 Hi-Pon 5 For the choice	0-03 Polyu ce of coatii	y Top Coat rethane Top Coat rethane Top Coat ng system for different oon Paint for profession		
		Base Hardener			

20L

5L

5L

10L

15L

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 flushed with water and seek 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.

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HI-PON 90-05 EPOXY HB 85

PRODUCT DESCRIPTION	Hi-Pon 90-05 Epoxy HB 85 is a two-pack, surface-tolerant, high solids modifie epoxy coating. It has excellent cathodic disbondment resistance and will continu- to cure when immersed in water.				
INTENDED USE	It is designed for use in highly corrosive environments, such as areas in the splash or tidal zones. Suitable for properly prepared carbon steel and concrete substrates in atmospheric and immersed environments. May be applied to wet blast or ultra high pressure water cleaned substrates. Recommended for offshore environments, refineries, power plants, bridges, mining equipments and general structural steels. Compatible with cathodic protection systems.				
GENERAL PROPERTIES	Colour : Black, Yellow Gloss Level : Gloss Volume Solids, % : 85 ± 2% Specific Gravity : 1.65 kg/l (Mixed) Flash Point : Base: 32°C Hardener: 44°C Mix: 32°C VOC : 204 g/L (EPA Method 24) Typical Thickness : 250 – 500 μm dry film 294 – 588 μm wet film : 294 – 588 μm wet film : 294 – 588 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. <u>Abrasive Blast Cleaning</u> 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. <u>Hand or Power Tool Preparation</u> Hand or power tool clean to a minimum St3 (ISO 8501-1:2007) or SSPC-SP3 for atmospheric use only. Note, all scale must be removed and areas which cannot be prepared adequately by chipping or needle gun should be spot blasted to a minimum standard of Sa 2 (ISO 8501-1:2007) or SSPC-SP6. <u>Ultra High Pressure Hydroblasting/Abrasive Wet Blasting</u> May be applied to surfaces prepared to Sa 2 (ISO 8501-1:2007) or SSPC-SP6 which have flash rusted to no worse than Grade HB2 M. It is also possible to apply to damp surfaces in some circumstances. <u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.				

Protective Coatings

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CONDITION

APPLICATION

DURING

HI-PON 90-05 EPOXY HB 85

Avoid paint application when the temperature is below 4°C and relative humidity

is above 85%. The temperature of steel surface must be minimum 3°C above dew



RECOMMENDED PAINTING	Shop PrimerZinky-10 Inorganic Zinc Shop Primer
SYSTEM	Primer
	· · · · · · · · ·
	Zinky-22 Epoxy Zinc Rich Primer 80
	Hi-Pon 20-04 STE IM 80
	 Hi-Pon 20-10 Epoxy Zinc Phosphate 63
	Intermediate/Topcoat
	• Hi-Pon 90-05 Epoxy HB 85
	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
	The on ob-ob roly demane rop obat
	For the obvious of excelling systems for elifference combination, when to the supplication
	For the choice of coating system for different application, refer to the product

PACKAGING Unit Base Hardener Vol **Container Size** Vol **Container Size** 20L 16L 20L 4L 5L 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 • 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 PRECAUTION 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 flushed with water and seek 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.

brochure or contact Nippon Paint for professional recommendation.

APPLICATION	Mixing Ratio	: Base:Hardener = 4:1 (by ve	olume)				
GUIDE		Base and hardener should	be mixed thorough before use				
	Pot Life	: 25°C 45 mins					
	Theoretical Coverage						
	Thinner	: Hi-Pon Epoxy Thinner					
METHOD APPLICATION DETAILS	film thickness.	: Tip Size Pressure at Nozzle	aken to achieve the specified : 0.021" – 0.026" : >170 kg/cm ²				
	Typical Thickness	: 250 – 500 μm dry film 294 – 588 μm wet film					
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)	: 25°C 40°C : 4 hrs 1.5 hrs : 7 hrs 3 hrs : 6 days 3 days : 7 hrs 3 hrs : 7 days 4 days				
	times before recoat ventilation, humidity and mechanical st system sheet, when When applied betwe immersed after 30 mi	ing may be shorter or longe v, underlying paint system, rength etc. A complete sy e all parameters and specia en tides on piles and jetties, H nutes. Early immersion will lea	es only. The actual drying tin r, depending on film thickne requirement for early handli stem can be described on I conditions could be include Ii-Pon 90-05 Epoxy HB 85 can ad to a slight whitening of colou				
RECOMMENDED			formanceishowevernotaffect				
PAINTING SYSTEM		nally applied directly to steel	; however, it can also be appli				

point of surrounding air.



HI-PON 90-05 EPOXY HB 85

HI-PON 90-07 EPOXY GLASS FLAKE HB 93

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

DISCLAIMER

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PRODUCT DESCRIPTION	Hi-Pon 90-07 Epoxy Glass Flake 93 is a two-pack, high build, high solids epoxy coating, reinforced with high level of chemically resistant glass flakes. It has excellent corrosion, impact and abrasion resistance.				
INTENDED USE	strength is required properly prepared of environments. Rec	se in highly corrosive environments where high mechanica d, such as areas in the splash or tidal zones. Suitable for carbon steel substrates in both atmospheric and immerser commended for offshore environments, refineries, powe ning equipments and general structural steels. Compatible ction systems.			
GENERAL	Colour	: Black			
PROPERTIES	Gloss Level	: Not Applicable			
	Volume Solids, %	: 93 ± 2%			
	Specific Gravity	: 1.41 kg/l (Mixed)			
	Flash Point	: Base: 23°C Hardener: 23°C Mix: 23°C			
	VOC	: 72 g/L (EPA Method 24)			
	Typical Thickness	: 500 – 1000 μm dry film			
		537 – 1075 μm wet film			
SURFACE PREPARATION	be assessed and tr	be clean, dry and free from contamination. The surface should eated in accordance with ISO 8504. Oil or grease should be ance with SSPC-SP1 solvent cleaning.			
•••••	be assessed and tri- removed in accorda Abrasive Blast Clear Abrasive blast clear performance, blast microns (3 – 4 mils). I of this product, the s Surface defect reve- treated in the appro <u>Other Surfaces</u>	eated in accordance with ISO 8504. Oil or grease should be ance with SSPC-SP1 solvent cleaning. ning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum cleaned to SSPC-SP10 with a surface profile of 75 – 10 If oxidation has occurred between the blasting and application surface should be re-blasted to the specified visual standard aled by the blast cleaning process should be ground, filled of priate manner.			
•••••	be assessed and tri removed in accorda Abrasive Blast Clear Abrasive blast clear performance, blast microns (3 – 4 mils). I of this product, the s Surface defect reve- treated in the appro <u>Other Surfaces</u> The coating may be Paint office for more Avoid paint applicat	eated in accordance with ISO 8504. Oil or grease should be ance with SSPC-SP1 solvent cleaning. ning ning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum cleaned to SSPC-SP10 with a surface profile of 75 – 100 If oxidation has occurred between the blasting and application surface should be re-blasted to the specified visual standard aled by the blast cleaning process should be ground, filled of priate manner. a used on other substrates. Please contact your local Nippon e information. tion when the temperature is below 10°C and relative humidit emperature of steel surface must be minimum 3°C above devi			
CONDITION DURING APPLICATION	be assessed and tri removed in accorda Abrasive Blast Clear Abrasive blast clear performance, blast microns (3 – 4 mils). I of this product, the s Surface defect reve- treated in the appro <u>Other Surfaces</u> The coating may be Paint office for more Avoid paint applicat is above 85%. The to	eated in accordance with ISO 8504. Oil or grease should be ance with SSPC-SP1 solvent cleaning. ning ning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum cleaned to SSPC-SP10 with a surface profile of 75 – 100 If oxidation has occurred between the blasting and application surface should be re-blasted to the specified visual standard aled by the blast cleaning process should be ground, filled of priate manner. a used on other substrates. Please contact your local Nippon e information. tion when the temperature is below 10°C and relative humidit emperature of steel surface must be minimum 3°C above devi			
CONDITION DURING APPLICATION	be assessed and trivermoved in accorda Abrasive Blast Clear Abrasive blast clear performance, blast microns (3 – 4 mils). I of this product, the s Surface defect rever treated in the appro Other Surfaces The coating may be Paint office for more Avoid paint applicat is above 85%. The te point of surrounding	eated in accordance with ISO 8504. Oil or grease should be ance with SSPC-SP1 solvent cleaning. ning ning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum cleaned to SSPC-SP10 with a surface profile of 75 – 100 If oxidation has occurred between the blasting and application surface should be re-blasted to the specified visual standard aled by the blast cleaning process should be ground, filled of priate manner. e used on other substrates. Please contact your local Nippon e information. tion when the temperature is below 10°C and relative humidit emperature of steel surface must be minimum 3°C above dev g air. : Base:Hardener = 3.5:1 (by volume)			

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Protective Coatings



HI-PON 90-07 EPOXY GLASS FLAKE HB 93



HI-PON 90-07 EPOXY GLASS FLAKE HB 93

RECOMMENDED PAINTING SYSTEM	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	
	18L	14L	20L	4L	5L	
STORAGE	Shelf Life		art A: 12 months (25°C) art B: 12 months (25°C)			
	the shelf life	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 tight from sources		ntainer in a dry, cool and ignition.	d well ventil	ated space, keep aw	
SAFETY PRECAUTION			led for use by profession n the container and in			
	using the	e 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 flushed with water and seek 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 had further a 		t regarding the suitabili	ity of use, re	efer to Nippon Paint f	

DISCLAIMER

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APPLICATION GUIDE	Theoretical Coverage Thinner	: 1.86 m²/litre at 500 μm DF 0.93 m²/litre at 1000 μm D : Hi-Pon Epoxy Thinner				
APPLICATION METHOD		mmended for application. Br d small areas. Care must be t				
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.036" - : >215 kg			
		Filters should be remove to spraying because of g		ay equipment prior		
	Typical Thickness	: 500 – 1000 μm dry film 537 – 1075 μm wet film				
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured* Dry to Recoat (min)* Dry to Recoat (max)*	: 4.5 hrs : 10 hrs : 7 days : 10 hrs	5 hrs 4 days 5 hrs		
	times before recoat ventilation, humidity mechanical strength	t be considered as guidelin ing may be shorter or longe , underlying paint system, re etc. A complete system can s and special conditions cou	er, depending quirement fo be described	g on film thickness, r early handling and d on a system sheet,		
RECOMMENDED	The following coatir Flake HB:	ng system is recommended	for Hi-Pon	90-07 Epoxy Glass		
SYSTEM		Hi-Pon 90-07 is normally applied directly to steel; however, it can also be applied over the following primers.				
	Shop Primer • Zinky-10 Inorga	nic Zinc Shop Primer				
	Primer Hi-Pon 20-03 E Hi-Pon 20-04 S 	poxy Red Oxide Primer TE IM 80				
	Topcoat • Hi-Pon 40-02 E • Hi-Pon 40-04 E • Hi-Pon 50-01 P					

Hi-Pon 50-03 Polyurethane Top Coat



HI-DRO 63-01 UNIVERSAL EPOXY

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, Limited colours Gloss Level : Gloss Volume Solids, % : 50 ± 2% Specific Gravity : 1.45 kg/l (Mixed) Flash Point : Base: >100°C Hardener: >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. <u>Abrasive Blast Cleaning</u> 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. <u>Other Surfaces</u> 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.			
APPLICATION GUIDE	Mixing Ratio : Base:Hardener = 4:1 (by volume) Base and hardener should be mixed thorough before use. Pot Life : 25°C 3 hrs			



HI-DRO 63-01 UNIVERSAL EPOXY

APPLICATION GUIDE	Theoretical Coverage					
	Thinner					
APPLICATION METHOD	for stripe coating a					
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.021" : >170 kg/cm²			
	Typical Thicknes	s : 75 – 125 μm dry film 150 – 250 μm wet film				
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)	: 25°C 40°C : 1 hr 45 mins : 7 hrs 3 hrs : 7 days 5 days : 4 hrs 3 hrs : 7 days 5 days			
	times before reco	ating may be shorter or longe	er, depending on film thickness			
	times before reco ventilation, humidi mechanical streng where all paramete The following coa	ating may be shorter or longe ity, underlying paint system, rea th etc. A complete system can ers and special conditions cou	er, depending on film thickness quirement for early handling and be described on a system sheet Id be included.			
RECOMMENDED PAINTING SYSTEM	times before reco ventilation, humidi mechanical streng where all parameter The following coa Epoxy:	ating may be shorter or longe ity, underlying paint system, rea- th etc. A complete system can ers and special conditions cou ating systems are recommend prmally applied directly to steel	es only. The actual drying time r, depending on film thickness quirement for early handling and be described on a system sheet Id be included. ded for Hi-Dro 63-01 Universa ; however, it can also be applied			
PAINTING	times before reco ventilation, humidi mechanical streng where all parameter The following coa Epoxy: Hi-Dro 63-01 is no over the following Primer • Hi-Pon 20-10	ating may be shorter or longe ity, underlying paint system, rea- th etc. A complete system can ers and special conditions cou ating systems are recommend prmally applied directly to steel	er, depending on film thickness quirement for early handling and be described on a system sheet Id be included.			
PAINTING	times before reco ventilation, humidi mechanical streng where all parameter The following coa Epoxy: Hi-Dro 63-01 is no over the following Primer • Hi-Pon 20-10 • Zinky-22 Epox Topcoat • Hi-Dro 60-01 • Hi-Dro 60-02 • Hi-Pon 40-04	ating may be shorter or longe ity, underlying paint system, rea- th etc. A complete system can ers and special conditions cou ating systems are recommend prmally applied directly to steel primers. Epoxy Zinc Phosphate 63	er, depending on film thickness quirement for early handling and be described on a system sheet Id be included.			



HI-DRO 63-01 UNIVERSAL EPOXY

PACKAGING	Unit	Base			Hardener		
		Vol	Container Size	Vol	Container Size		
	20L	16L	20L	4L	5L		
STORAGE	Shelf Life		art A: 12 months (25°C) art B: 12 months (25°C)				
	the shelf life	Subject to re-inspection thereafter. Higher temperature during storage may re the shelf life and may lead to gelling in the tin. Frequent temperature cycles also shorten the shelf life.					
	Store in tight from sources	ated space, keep away					
SAFETY PRECAUTION			ded for use by profession the container and in				
		ave any doub dvice.	t regarding the suitabil	ity of use, re	efer to Nippon Paint for		

DISCLAIMER

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HI-PON 40-02 EPOXY TOPCOAT

PRODUCT DESCRIPTION	Hi-Pon 40-02 Epoxy Topcoat is a two-pack amine-adduct cured epoxy finis coat specially developed to achieve long-term corrosion protection for mar type of surfaces i.e. aluminium, galvanising, concrete and mild steel. This featur combined with its wide range of resistance properties make Hi-Pon 40-02 durable, high performance and economical coating for non-immersion as well a immersion services.				
INTENDED USE	It is extensively used as a durable, high performance and economical coating for non-immersion as well as immersion service. For immersion service, it has been extensively used for long term corrosion protection lining of storage tank for palm oil derivatives, vegetable oil, portable water and etc.				
GENERAL PROPERTIES	Colour : White, Limited colours Gloss Level : Low-gloss Volume Solids, % : 55 ± 2% Specific Gravity : 1.25 - 1.38 kg/l (Mixed) depending on colours Flash Point : Base: 7°C Hardener: 23°C Mix: 7°C VOC : 474 g/L (EPA Method 24) Hardener: 23°C Mix: 7°C Typical Thickness : 80 - 150 µm dry film 150 - 275 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. <u>Damage Area</u> 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 40-02 Epoxy Top Coat. Hi-Pon 40-02 Epoxy Top Coat 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 40-02 must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> 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 over 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air.				



APPLICATION

GUIDE

Mixing Ratio

HI-PON 40-02 EPOXY TOPCOAT

Base and hardener should be mixed thoroughly before use.

: Base:Hardener = 9:1 (by volume)



HI-PON 40-02 EPOXY TOPCOAT

RECOMMENDED PAINTING SYSTEM	 Hi-Pon 3 Hi-Pon 3 Hi-Pon 4 For the choice 	0-02 Epoxy	MIO 80 Midcoat 80		
PACKAGING	Unit		Base		Hardener
		Vol	Container Size	Vol	Container Size
	5L	4.5L	5L	0.5L	1L
	20L	18L	20L	2L	5L
	Subject to re-	incroation t			
	also shorten t	and may lea the shelf life. y closed cor	ad to gelling in the tin. ntainer in a dry, cool ar	Frequent te	mperature cycles ma
SAFETY PRECAUTION	also shorten to Store in tightl from sources • This proc informati using the • Use this	and may lea the shelf life. y closed cor of heat and duct is intend on display o product. product in w	ad to gelling in the tin ntainer in a dry, cool ar ignition. ded for use of professi in the container and in rell-ventilated area, avo	Frequent te	ated space, keep awa ors. Refer to the safe ata sheet (SDS) befo
	 also shorten f Store in tightl from sources This proc informati using the Use this should in Eye shou upon cor 	and may lead the shelf life. y closed cor of heat and duct is intend on display of product. product in w nmediately b uld be well fl ntact with thi	ad to gelling in the tin ntainer in a dry, cool ar ignition. ded for use of profession in the container and in rell-ventilated area, avor- be removed with suitable ushed with water and is product.	Frequent te nd well ventila onal applicate the safety da old skin conta ole cleanser, s seek medical	ated space, keep awa ors. Refer to the safe ata sheet (SDS) befo act, spillage on the sk soap and water.
	also shorten t Store in tight from sources • This proc informati using the • Use this should in • Eye shou upon cor • During the allowed.	and may lea the shelf life. y closed cor of heat and duct is intend on display o product. product in w nmediately b ild be well flintact with thi ne application Adequate ver	ad to gelling in the tin ntainer in a dry, cool ar ignition. ded for use of profession the container and in rell-ventilated area, avon be removed with suitabout ushed with water and	Frequent te ad well ventila onal applicate the safety da bid skin conta ble cleanser, s seek medical ling operatio ovided.	mperature cycles ma ated space, keep awa ors. Refer to the safe ata sheet (SDS) befo act, spillage on the sk soap and water. I attention immediate n and smoking is n

DISCLAIMER

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Theoretical	5 hrs	
Coverage	: 6.8 m ² /litre at 80 μm DFT 3.6 m ² /litre at 80 μm DFT	
Thinner	: Hi-Pon Epoxy Thinner	
Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.023" : 140 – 170 kg/cm²
Typical Thickness	: 80 – 150 μm dry film 150 – 275 μm wet film	
Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)	: 25°C 40°C : 1.5 hrs 0.5 hrs : 7 hrs 3 hrs : 7 days 3 days : 7 hrs 3 hrs : 30 days 14 days
imes before recoati ventilation, humidity, nechanical strength	ng may be shorter or longer underlying paint system, rec etc. A complete system can b	r, depending on film thickness, uirement for early handling and be described on a system sheet,
Fop Coat: Primer Zinky-12 Inorgar Zinky-13 Inorgar Zinky-21 Epoxy Zinky-22 Epoxy Hi-Pon 20-01 Ep Hi-Pon 20-04 ST Hi-Pon 20-04 ST Hi-Pon 20-07 Ep Hi-Pon 20-10 Ep ntermediate	nic Zinc Rich Primer 77 nic Zinc Rich Primer 85 Zinc Rich Primer 77 Zinc Rich Primer 80 poxy Primer poxy Red Oxide Primer TE 80 TE IM 80 poxy Zinc Phosphate 70 poxy Zinc Phosphate 63	lended for Hi-Pon 40-02 Epoxy
	Airless spray is recor or stripe coating and ilm thickness. Airless Spray Typical Thickness Drying Time The given data musi imes before recoati rentilation, humidity, nechanical strength where all parameters The following Primer To Coat: Primer Zinky-12 Inorgar Zinky-13 Inorgar Zinky-21 Epoxy Zinky-21 Epoxy Zinky-21 Epoxy Zinky-22 Epoxy Hi-Pon 20-01 Ep Hi-Pon 20-04 ST Hi-Pon 20-07 Ep Hi-Pon 20-10 Ep	Airless spray is recommended for application. Bru or stripe coating and small areas. Care must be tail in thickness. Airless Spray : Tip Size Pressure at Nozzle Typical Thickness : 80 – 150 µm dry film 150 – 275 µm wet film Drying Time : Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (min) Dry to Recoat (max) The given data must be considered as guideline imes before recoating may be shorter or longel rentilation, humidity, underlying paint system, recon- ternitiation, humidity, underlying paint system, recon- where all parameters and special conditions coul The following Primers/Intermediates are recommen- top Coat: Primer Zinky-12 Inorganic Zinc Rich Primer 77 Zinky-12 Inorganic Zinc Rich Primer 85 Zinky-21 Epoxy Zinc Rich Primer 80 Hi-Pon 20-01 Epoxy 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



HI-PON 40-04 EPOXY TOPCOAT

PRODUCT DESCRIPTION	Hi-Pon 40-04 Epoxy Topcoat is a two-pack amine-adduct cured epoxy finish coat 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	It 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 ± 2% Specific Gravity : 1.00 - 1.30 kg/l (Mixed) depending on colours Flash Point : Base: 23°C Hardener: 23°C VOC : 535 g/L (EPA Method 24) Typical Thickness : 50 - 100 µm dry film 80 - 130 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. <u>Damaged Area</u> 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 40-04 Epoxy Top Coat. Hi-Pon 40-04 Epoxy Top Coat 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 application section for details). <u>Other Surfaces</u> 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 over 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air.			



HI-PON 40-04 EPOXY TOPCOAT

APPLICATION GUIDE	Mixing Ratio	: Base:Hardener = 4:1 (by v Base and hardener should	olume) I be mixed thoroughly before use		
	Pot Life	: 25°C 6 hrs			
	Theoretical Coverage	: 10.2 m²/litre at 50 μm DFT 5.1 m²/litre at 100 μm DFT			
	Thinner	: Hi-Pon Epoxy Thinner			
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dr		
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.023" : 140 – 170 kg/cm²		
	Typical Thickness	: 50 – 100 μm dry film 80 – 130 μm wet film			
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)	: 25°C 40°C : 1.5 hrs 0.5 hrs : 7 hrs 3 hrs : 7 days 3 days : 7 hrs 3 hrs : 30 days 14 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	The following coatin	ng systems are recommended	d for Hi-Pon 40-04 Top Coat:		
RECOMMENDED PAINTING SYSTEM	 Zinky-13 Inorga Zinky-21 Epoxy Zinky-22 Epoxy Hi-Pon 20-01 E Hi-Pon 20-03 E Hi-Pon 20-04 S Hi-Pon 20-04 S Hi-Pon 20-07 E 	poxy Red Oxide Primer TE 80			
	· III-F0I120-10 L				



PAINTING

PACKAGING

STORAGE

SAFETY PRECAUTION

SYSTEM

RECOMMENDED

• Hi-Pon 20-04 STE AL 80

HI-PON 40-04 EPOXY TOPCOAT



HI-PON 50-01 POLYURETHANE TOPCOAT

 Hi-Pon 2 Hi-Pon 2 Hi-Pon 2 	0-04 STE A 0-04 STE G 0-04 STE IN 0-04 STE M 0-02 Epoxy	iF 80 // 80 11O 80			DESCRIPTION
Hi-Pon 3 For the choice	0-03 Epoxy	g system for different			INTENDED USE
Unit		Base		Hardener	GENERAL
	Vol	Container Size	Vol	Container Size	PROPERTIES
5L	4L	5L	1L	1L	
20L	16L	20L	4L	5L	
	Pa- inspection t and may lea	art A: 12 months (25°C) art B: 12 months (25°C) thereafter. Higher tempe ad to gelling in the tin.	erature durir		
	y closed cor	ntainer in a dry, cool and	d well ventila	ated space, keep away	SURFACE PREPARATION
informati		ded for use of professio in the container and in t			
		vell-ventilated area, avoi be removed with suitabl			
	ld be well fl	ushed with water and s is product.	eek medica	l attention immediately	
		on, naked flame, weldi entilation should be pro		on and smoking is not	
 If you ha further ad 		ot regarding the suitabili	ty of use, re	efer to Nippon Paint for	
					CONDITION

DISCLAIMER

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PRODUCT DESCRIPTION	Hi-Pon 50-01 Polyurethane Topcoat is a two-pack, high-gloss aliphatic acrylic polyurethane finish coat. It provides high durability, excellent gloss and colour retention. It also offers good abrasion, chemical and impact resistance when applied over proven systems.			
INTENDED USE	It is suitable for use in both new construction and as an industrial maintenance finish which can be used in a wide range of environments including offshore structures, refineries, power plants, bridges, transportation vehicles and buildings.			
GENERAL PROPERTIES	Colour: Standard colours as per colour cards. Special colours available upon requestGloss Level: High-glossVolume Solids, %: $60 \pm 2\%$ Specific Gravity: $0.98 - 1.25$ kg/l (Mixed) depending on coloursFlash Point: Base: 23° CVOC: 386 g/L (EPA Method 24)Typical Thickness: $50 - 80$ µm dry film $83 - 133$ 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. Damage 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 50-01 Polyurethane Top Coat. Hi-Pon 50-01 Polyurethane Top Coat 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 50-01 must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> 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 over 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air.			

Protective Coatings



APPLICATION

APPLICATION

APPLICATION

RECOMMENDED

PAINTING SYSTEM

112

METHOD

DETAILS

GUIDE

Mixing Ratio

Pot Life

Thinner

Theoretical

Theoretical

Airless Spray

Drying Time

adhesion.

Primer

•

•

•

Polyurethane Top Coat:

HI-PON 50-01 POLYURETHANE TOPCOAT

Base and hardener should be mixed thoroughly before use.

: 0.011" - 0.018"

: 25°C

: 1 hr

: 7 hrs

: 7 hrs

: Extended

: 140 - 170 kg/cm²

: 5 days 2 days

40°C 0.5 hrs

4 hrs

4 hrs

: Base:Hardener = 4:1 (by volume)

Conventional air and airless spray are recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to

: 12.0 m²/litre at 50 µm DFT

7.5 m²/litre at 80 µm DFT

: Hi-Pon PU Thinner

Pressure at Nozzle

83 – 133 µm wet film

Dry to Recoat (min)

Dry to Recoat (max)*

where all parameters and special conditions could be included.

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

The following Primers/Intermediates are recommended for Hi-Pon 50-01

Surface Dry

Through Dry

Cured

: Substrate Temperature

: 25°C 2.5 hrs

: Tip Size

achieve the specified dry film thickness.

Typical Thickness : 50 – 80 µm dry film

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PPON PAINT	

HI-PON 50-01 POLYURETHANE TOPCOAT

PAINTING SYSTEM	 Hi-Pon 2 Intermediat. Hi-Pon 2 Hi-Pon 3 Hi-Pon 3 For the choir 	0-10 Epoxy 9 0-04 STE 8 0-04 STE IN 0-02 Epoxy 0-03 Epoxy ce of coatin	/ 80 MIO 80 Midcoat 80		n, refer to the product endation.
PACKAGING	Unit		Base		Hardener
		Vol	Container Size	Vol	Container Size
	5L	4L	5L	1L	1L
	20L	16L	20L	4L	5L
	also shorten			d well ventil	ated space, keep away
	Store in tightl from sources				
SAFETY PRECAUTION	from sources This proc informati	of heat and	ignition. ded for use of professic	onal applicat	ors. Refer to the safety
	from sources This proc informati using the Use this	of heat and duct is intend on display o product. product in w	ignition. Jed for use of professic n the container and in	onal applicat the safety c id skin conta	ors. Refer to the safety ata sheet (SDS) before act, spillage on the skin
	 from sources This prodinformati using the Use this should in Eye should 	of heat and duct is intend on display of product. product in w nmediately b	ignition. ded for use of professic n the container and in rell-ventilated area, avo pe removed with suitable ushed with water and s	onal applicat the safety c id skin conta le cleanser,	ors. Refer to the safety ata sheet (SDS) before act, spillage on the skin
	 from sources This prodinformation Use this should in Eye shou upon color During the 	of heat and duct is intend on display o product. product in w nmediately b and be well fil ntact with thi ne application	ignition. ded for use of professic n the container and in ell-ventilated area, avo be removed with suitablushed with water and s is product.	onal applicat the safety c id skin contu le cleanser, seek medica	ors. Refer to the safety lata sheet (SDS) before act, spillage on the skin soap and water.

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Zinky-12 Inorganic Zinc Rich Primer 77 Zinky-13 Inorganic Zinc Rich Primer 85

Zinky-21 Epoxy Zinc Rich Primer 77 Zinky-22 Epoxy Zinc Rich Primer 80

Zinky-23 Epoxy Zinc Rich Primer 85

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 50-03 POLYURETHANE TOPCOAT

PRODUCT DESCRIPTION	Hi-Pon 50-03 Polyurethane Topcoat is two-pack, semi-gloss aliphatic polyurethane finish coat. It provides high durability, excellent gloss and colour retention. It also offers good abrasion, chemical and impact resistance when applied over proven systems.			
INTENDED USE	It is suitable for use in both new construction and as an industrial maintenance finish which can be used in a wide range of environments including offshore structures, refineries, power plants, bridges, transportation vehicles and buildings.			
GENERAL PROPERTIES	Colour : Standard colours as per colour cards. Special colours available upon request Gloss Level : Semi-gloss Volume Solids, % : 58 ± 2% (Depend on colours) Specific Gravity : 1.30 – 1.42 kg/l (Mixed) depending on colours Flash Point : Base: 23°C VOC : 370 g/L (EPA Method 24) Typical Thickness : 50 – 80 µm dry film 85 – 135 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. Damage 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 50-03 Polyurethane Top Coat. Hi-Pon 50-03 Polyurethane Top Coat 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 50-03 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 and relative humidity is over 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air.			



HI-PON 50-03 POLYURETHANE TOPCOAT

APPLICATION	Mixing Ratio	: Base:Hardener = 5:1 (by vo	blume)			
GUIDE		Base and hardener should	be mixed thoroughly before use.			
	Pot Life	: 25°C 4 hrs				
	Theoretical : 11.6 m²/litre at 50 μm DFT Theoretical 7.2 m²/litre at 80 μm DFT					
	Thinner	: Hi-Pon PU Thinner				
APPLICATION METHOD	roller are recommend	onventional air and airless spray are recommended for application. Brush and iller are recommended for stripe coating and small areas. Care must be taken to chieve the specified dry film thickness.				
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.011" – 0.018" : 140 – 170 kg/cm²			
	Typical Thickness	: 50 – 80 μm dry film 85 – 135 μm wet film				
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)*	: 25°C 40°C : 1 hr 0.5 hrs : 8 hrs 4 hrs : 7 days 4 days : 8 hrs 4 hrs : 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					
	adirectori					
RECOMMENDED PAINTING SYSTEM	adhesion. The following coating systems are recommended for Hi-Pon 50-03 Polyuretha Top Coat: Primer Zinky-12 Inorganic Zinc Rich Primer 77 Zinky-21 Epoxy Zinc Rich Primer 85 Zinky-21 Epoxy Zinc Rich Primer 80 Zinky-23 Epoxy Zinc Rich Primer 80 Zinky-23 Epoxy Zinc Rich Primer 85 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 10 80					



HI-PON 50-03 POLYURETHANE TOPCOAT

RECOMMENDED PAINTING SYSTEM	 Hi-Pon 20-07 Epoxy Zinc Phosphate 70 Hi-Pon 20-10 Epoxy Zinc Phosphate 63 Intermediate Hi-Pon 20-04 STE 80 Hi-Pon 20-04 STE IM 80 Hi-Pon 30-02 Epoxy MIO 80 Hi-Pon 30-03 Epoxy Midcoat 80 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
	4.8L	4L	5L	0.8L	1L
	19.8L	16.5L	20L	3.3L	5L
	the shelf life also shorten	-inspection t and may lea the shelf life. ly closed cor	d to gelling in the tin. tainer in a dry, cool ar	perature durir Frequent te	ng storage may reduce mperature cycles may ated space, keep away
SAFETY PRECAUTION	 informatiusing the using the should in the should be should b	ion display o product. product in w nmediately b uld be well fli ntact with thi he applicatic Adequate ve we any doub	n the container and in ell-ventilated area, avc e removed with suitab ushed with water and s product. on, naked flame, welc entilation should be pro	the safety d bid skin conta ble cleanser, s seek medica bing operatio bvided.	ors. Refer to the safety ata sheet (SDS) before act, spillage on the skin soap and water. I attention immediately n and smoking is not fer to Nippon Paint for

DISCLAIMER

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HI-ACRYL 1901 ACRYLIC TOPCOAT

PRODUCT DESCRIPTION	Hi-Acryl 1901 Acrylic Topcoat is a one-pack, fast-drying acrylic copolymer finis coat. It has good weatherability, hardness and abrasion resistance performanc to provide durable performance in harsh and rugged conditions.			
INTENDED USE	It is designed for use as a top coat over a suitable primer on the exterior of steel structures.			
GENERAL PROPERTIES	Colour : Limited Range of Colour Gloss Level : Matt Volume Solids, % : 40 ± 2% Specific Gravity : 1.25 - 1.40 kg/l (Mixed) depending on colours Flash Point : 23°C VOC : 535 g/L (EPA Method 24) Typical Thickness : 40 - 60 µm dry film 100 - 150 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-Acryl 1901. Hi-Acryl 1901 Acrylic Top Coat 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-Acryl 1901 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 and relative humidity is above 85%. The temperature of steel surface must be minimum 3°C above dew point of surrounding air.			
APPLICATION GUIDE	Mixing : Mixed thoroughly before use with a power agitator. Theoretical : 10.0 m²/litre at 40 μm DFT Coverage 6.7 m²/litre at 60 μm DFT			

D5 - Page 1 of 3



HI-ACRYL 1901 ACRYLIC TOPCOAT



HI-ACRYL 1901 ACRYLIC TOPCOAT

STORAGE	Shelf Life: 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 flushed with water and seek 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. 							

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APPLICATION GUIDE	Thinner	: H	: Hi-Pon Acrylic Thinner			
APPLICATION METHOD		nended f	ess spray are recomme or stripe coating and sr film thickness.			
APPLICATION DETAILS	Airless Spray		p Size ressure at Nozzle	: 0.011" – : 140 – 17		
	Typical Thickne		0 – 60 µm dry film 00 – 150 µm wet film			
	times before rec ventilation, humi and mechanical	Si T C D nust be coating n dity, unc	ubstrate Temperature urface Dry hrough Dry ured ry to Recoat (min) ry to Recoat (max) considered as guidelir nay be shorter or long lerlying paint system, th th etc. A complete s parameters and specie	er, depending ne requiremen ystem can b	2 hrs 2 hrs 2 hrs 1 mth actual drying time/ on film thickness, t for early handling e described on a	
RECOMMENDED PAINTING SYSTEM	Coat: Primer • Hi-Vinyl 120 • Hi-Pon 20-0 • Hi-Pon 20-0 • Hi-Pon 20-0 • Hi-Pon 20-0 • Hi-Pon 90-0 Intermediate • Hi-Pon 30-0 • Hi-Pon 30-0 For the choice o	1 Zinc Pl 3 Epoxy 4 STE 8 4 STE IN 7 Epoxy 1 Epoxy 2 Epoxy 3 Epoxy f a coati	1 80 Zinc Phosphate 70 Glass Flake HB 95 MIO 80	application, r	efer to the product	
PACKAGING	Unit	Vol	Container Size			

PACKAGING	Unit	Vol	Container Size
	20L	20L	20L



HI-FLORO 6738 FLUOROCARBON TOPCOAT

PRODUCT DESCRIPTION	Hi-Floro 6738 Fluorocarbon Topcoat is a two-pack, fast dry fluorocarbon finish coat. It provides excellent film stability, good resistance of contamination, weathering and chemicals.						
INTENDED USE	As long term protection of high performance topcoat especially used for the structures with higher requirements of contamination resistance and weathering resistance etc, such as bridges, petrochemicals, power generations, steel structures and other steel works.						
GENERAL PROPERTIES	Colour : Colour range based on assortment list Gloss Level : Semi-gloss Volume Solids, % : 46 ± 2% Specific Gravity : 0.98 - 1.28 kg/l (Mixed) depending on colours Flash Point : Base: 13.3°C Hardener: 24°C VOC : 480 g/L (EPA Method 24) Typical Thickness : 40 - 60 µm dry film 87 - 130 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. <u>Damaged Area</u> 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-Floro 6738. Hi-Floro 6738 Fluorocarbon Top Coat 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). <u>Other Surfaces</u> 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 minimum 3°C above dew point of the surrounding air.						
APPLICATION GUIDE	Mixing Ratio : Base:Hardener = 14:1 (by volume) Base and hardener should be mixed thoroughly before use.						



HI-FLORO 6738 FLUOROCARBON TOPCOAT

APPLICATION GUIDE	Pot Life	: 25°C 6 hrs			
	Theoretical Coverage	 1.5 m²/litre at 40 μm DFT 7.6 m²/litre at 60 μm DFT 			
	Thinner	: Hi-Floro 6738 Thinner			
APPLICATION METHOD		d airless spray are recomme ded for stripe coating and sm d dry film thickness.			
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.006" – : 100 – 15		
	Typical Thickness	: 40 – 60 μm dry film 87 – 130 μm wet film			
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)	: 10°C : 1 hr : 10 hrs : 10 days : 10 hrs : 2 weeks	4 hrs 7 days 4 hrs	2 hrs
	times before recoat ventilation, humidity mechanical strength	t be considered as guidelin- ing may be shorter or longe , underlying paint system, re- etc. A complete system can s and special conditions cou	er, depending quirement for be described	on film f early har on a syst	thicknes ndling ar
RECOMMENDED PAINTING SYSTEM	Top Coat: Primer · Zinky-12 Inorga · Zinky-13 Inorga · Zinky-21 Epoxy · Zinky-22 Epoxy · Zinky-23 Epoxy · Linky-23 Epoxy · Hi-Pon 20-01 E · Hi-Pon 20-04 S · Hi-Pon 20-07 E	poxy Red Oxide Primer TE 80	d for Hi-Floro	6738 Fluo	orocarbo
	·····	Soxy Zine i neophate ee			



HI-FLORO 6738 FLUOROCARBON TOPCOAT



HI-DRO 60-01 ACRYLIC SHEEN TOPCOAT

PRODUCT DESCRIPTION	Hi-Dro 60-01 Acrylic Sheen Topcoat is a one-pack, high performance, water- based acrylic finish coat, specially formulated with enhanced anti-algae and anti- streak marks performance.
INTENDED USE	It is designed for use over a suitable primer and intermediate in a wide range of environments, including offshore structures, bridges, sport stadia, refineries, petrochemical and chemical plants. Enhanced resistance to fungal and algal growth Enhanced anti-streak marks property keeping the façade clean Excellent weather durability under local climatic conditions Good adhesion on stable surfaces Easy application with good levelling property
GENERAL PROPERTIES	Colour : Wide range of colours Gloss Level : Low Sheen Volume Solids, % : 38 ± 2 % Specific Gravity : 1.34 – 1.38 kg/l (Depending on colours)
	Flash point : >100oC VOC : 67 g/L (EPA Method 24) Typical Thickness : 40 - 60 μm dry film 105 - 158 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-Dro 60-01 Acrylic Sheen Top Coat.
	 Hi-Dro 60-01 Acrylic Sheen Top Coat 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-Dro 60-01 must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.
	DESCRIPTION INTENDED USE GENERAL PROPERTIES SURFACE

RECOMMENDED Hi-Pon 30-03 Epoxy Midcoat 80 PAINTING SYSTEM

For the choice of coating system for different applicatio brochure or contact Nippon Paint for professional recomm

PACKAGING	Unit		Base	Hardener				
		Vol	Container Size	Vol	Container Size			
	15L	14L	20L	1L	1L			
STORAGE		Pa-inspection t) berature duri	ng storage may reduce			
	the shelf life also shorten			Frequent te	emperature cycles may			
		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 flushed with water and seek 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

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CONDITION

HI-DRO 60-01 ACRYLIC SHEEN TOPCOAT



HI-DRO 60-01 ACRYLIC SHEEN TOPCOAT

is above 75%, otherw The temperature of st surrounding air. The application should coating. Poor ventilati cracked film which will Mixing : Theoretical : Coverage : Thinner :	The application should not fall below minimum film forming temperature of the coating. Poor ventilation will result in poor film coalescence and a powdery cracked film which will require removal and re-application. Mixing : Mixed thoroughly before use with a power agitator. Theoretical : 9.5 m²/litre at 40 µm DFT Coverage : 6.3 m²/litre at 60 µm DFT		RECOMMENDED PAINTING SYSTEM	PAINTING Top Coat:		led for Hi-Dro 60-01 Acrylic Sheen	
	e coating and small areas. Ca	olication. Brush and roller are are must be taken to achieve the	RECOMMENDED PAINTING SYSTEM				t application, refer to the product onal recommendation.
Airless Spray :	Tip Size Pressure at Nozzle	: 0.015" − 0.021" : >150 kg/cm²]
Typical Thickness :			PACKAGING	Unit 5L	Vol 5L	Container Size 5L	
	·	: 30°C		20L	20L	20L	
The given data must b times before recoating ventilation, humidity, u mechanical strength et where all parameters a * Where an "extended"			STORAGE SAFETY PRECAUTION	Shelf Life : 24 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 awa from sources of heat and ignition. • This product is intended for use by professional applicators. Refer to the safe information display on the container and in the safety data sheet (SDS) befor using the product. • Use this product in well-ventilated area, avoid skin contact, spillage on the skin contact.			onal applicators. Refer to the safety the safety data sheet (SDS) before

DURING	is above 75%, otherwise drying and overcoating times will severely extended. The temperature of steel surface must be minimum 3°C above dew point of surrounding air. The application should not fall below minimum film forming temperature of the coating. Poor ventilation will result in poor film coalescence and a powdery cracked film which will require removal and re-application.					
APPLICATION GUIDE	Mixing Theoretical Coverage Thinner	 Mixed thoroughly before us 9.5 m²/litre at 40 μm DFT 6.3 m²/litre at 60 μm DFT Clean portable water Ready for use, if necessar than 5% water 	e with a power agitator. ry, dilution should not be more			
APPLICATION METHOD		ipe coating and small areas. C	plication. Brush and roller are are must be taken to achieve the			
APPLICATION DETAILS	The given data mus times before recoat ventilation, humidity mechanical strength where all parameters * Where an "extende	ing may be shorter or longer , underlying paint system, req etc. A complete system can b s and special conditions could d" overcoating time is stated,	: 0.015" - 0.021" : >150 kg/cm ² : 30°C : 1 hr : 4 hrs : 4 hrs : Extended s only. The actual drying time/ r, depending on film thickness, juirement for early handling and be described on a system sheet, d be included. consult Nippon Paint Protective n to achieve optimal intercoat			



SAFETY

PRECAUTION

•

•

further advice.

HI-DRO 60-01 ACRYLIC SHEEN TOPCOAT

Eye should be well flushed with water and seek medical attention immediately

· During the application, naked flame, welding operation and smoking is not

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



HI-DRO 60-02 ACRYLIC GLOSS TOPCOAT

PRODUCT DESCRIPTION	Hi-Dro 60-02 Acrylic Gloss Topcoat is a one-pack, high performance, water- based acrylic finish coat. It has extremely low odour during application and drying.						
INTENDED USE	 It is designed for use over a suitable primer and intermediate in a wide range of environments, including offshore structures, bridges, sport stadia, refineries, petrochemical and chemical plants. Non-toxic, does not contain lead, mercury and heavy metals Good alkaline resistance Anti-fungus property and anti-bacterial property Easy application Good coverage and hiding power Good stain resistance 						
GENERAL PROPERTIES	Colour: Wide range of coloursGloss Level: GlossVolume Solids, %: $38 \pm 2\%$ Specific Gravity: $1.24 - 1.28 \text{ kg/l}$ (Depending on colours)Flash point: >100°CVOC: 70 g/L (EPA Method 24)Typical Thickness: $40 - 60 \mu \text{m dry film}$ 105 - 158 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-Dro 60-02 Acrylic Gloss Top Coat. Hi-Dro 60-02 Acrylic Gloss Top Coat 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-Dro 60-02 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.						

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DISCLAIMER

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allowed. Adequate ventilation should be provided.

upon contact with this product.

Protective Coatings



HI-DRO 60-02 ACRYLIC GLOSS TOPCOAT

CONDITION DURING APPLICATION	Avoid paint application when the temperature is below 10°C and relative humidity is above 75%, otherwise drying and overcoating times will severely extended. The temperature of steel surface must be minimum 3°C above dew point of surrounding air. The application should not fall below minimum film forming temperature of the coating. Poor ventilation will result in poor film coalescence and a powdery cracked film which will require removal and re-application.					
APPLICATION GUIDE	Mixing Theoretical Coverage Dilution	 Mixed thoroughly before us 9.5 m²/litre at 40 µm DFT 6.3 m²/litre at 60 µm DFT Clean portable water Ready for use, if necessary than 5% water 	se with a power agitator. /, dilution should not be more			
APPLICATION METHOD		ipe coating and small areas. C	oplication. Brush and roller are Care must be taken to achieve the			
APPLICATION DETAILS	The given data mustimes before recoativentilation, humidity, mechanical strength where all parameters	ng may be shorter or longe underlying paint system, rec etc. A complete system can l s and special conditions coul d" overcoating time is stated,	: 0.015" - 0.021" : >150 kg/cm ² : 30°C : 1 hr : 4 hrs : 4 hrs : Extended es only. The actual drying time/ r, depending on film thickness, quirement for early handling and be described on a system sheet, Id be included. consult Nippon Paint Protective n to achieve optimal intercoat			
RECOMMENDED PAINTING SYSTEM	Top Coat: Primer • Hi-Pon 20-01 Ep		I for Hi-Dro 60-02 Acrylic Gloss			



HI-DRO 60-02 ACRYLIC GLOSS TOPCOAT

RECOMMENDED PAINTING SYSTEM	 Hi-Pon 2 Hi-Pon 2 Hi-Pon 2 Hi-Dro 6 Intermediat Hi-Pon 2 Hi-Pon 2 Hi-Pon 3 Talkalitt For the choi	20-10 Epoxy 33-01 Univers e 20-04 STE 8(20-04 STE IN 30-02 Epoxy 30-03 Epoxy S100 ce of coatin	1 80 Zinc Phosphate 70 Zinc Phosphate 63 sal Epoxy 1 80 MIO 80 Midcoat 80 g system for differer	nt application, refer to the product onal recommendation.		
PACKAGING	Unit	Vol	Container Size]		
	5L	5L	5L			
	20L	20L	20L			
	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	 Informat using the Use this should in Eye shou upon co During t 	ion display o e product. product in w mmediately b uld be well flu ntact with thi he applicatio	n the container and ir ell-ventilated area, av- e removed with suital ushed with water and s product.	ional applicators. Refer to the safety in the safety data sheet (SDS) before oid skin contact, spillage on the skin ble cleanser, soap and water. seek medical attention immediately ding operation and smoking is not rovided.		
	 If you have any doubt regarding the suitability of use, refer to Nippon Paint for further advice. 					

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HI-PON 80-03 EPOXY PHENOLIC PRIMER

PRODUCT DESCRIPTION	blast cleaned steel s made it a durable, h	Hi-Pon 80-03 Epoxy Phenolic Primer is a two-pack epoxy phenolic coating for blast cleaned steel surfaces. Its wide range of chemical resistance properties has made it a durable, high performance coating for steelwork and concrete surface with immersion as well as non-immersion services.						
INTENDED USE	0	is designed for long-term corrosion protection lining of storage tank for a wide ange of chemicals, solvents, crude oil, aggressive palm oil and vegetable oil erivatives.						
GENERAL PROPERTIES	Colour Gloss Level Volume Solids, % Specific Gravity Flash Point VOC Typical Thickness	: 1.40 kg/l (Mixed) : Base: 13.3°C Hardener: 35°C Mix: 13.3°(: 357 g/L (EPA Method 24)						
		155 – 310 μm we						
SURFACE PREPARATION	should be assessed be removed in accor Abrasive Blast Clear Abrasive blast clean blast cleaned to SSF If oxidation has occ the surface should b revealed by the blas appropriate manner. Shop Primer Surface This product is suit coated with zinc silic widely scattered bre will be necessary. C and will required con damaged areas shoul Damaged Area Damage area shoul 8501-1:2007). When	and treated in accidance with SSPC-S ning ing to Sa 2½ (ISO 8 PC-SP10 with a surf urred between the re-blasted to the t cleaning process table for application ate shop primers. If eakdown or excession other types of shop mplete removal by a uld be blast cleaned d be prepared with abrasive blasting 07) is acceptable.	I free from contamir ordance with ISO 850 SP1 solvent cleaning. 3501-1:2007). For opti ace profile of 50 – 75 blasting and applicat specified visual stand should be ground, fill n to the unweathered the zinc shop primer ve zinc corrosion, ove primer are not suital abrasive blast cleanin I to Sa 21/2 (ISO 8501- n abrasive blast clear is not possible, mec After the surface pre	04 or grease should imum performance, microns (2 – 3 mils). ion of this product, lard. Surface defect led or treated in the d steelwork freshly shows extensive or erall sweep blasting ble for over coating g. Weld seams and 1:2007).				



HI-PON 80-03 EPOXY PHENOLIC PRIMER

SURFACE PREPARATION	Hi-Pon 80-03 Epoxy Phenolic Primer should be applied over a surface that is dry and free from dirt, grease, oil and other contaminants and must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> 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 over 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air. Ensure proper ventilation to have air movement to remove solvent.						
APPLICATION	Mixing Ratio	ing Ratio : Base:Hardener = 6:1 (by volume)					
GUIDE	-	Base and hardener should	-	oughly before use.			
	Pot Life	: 25°C 4 hrs					
	Theoretical Coverage	l : 6.5 m²/litre at 100 µm DFT 3.2 m²/litre at 200 µm DFT					
	Thinner	: Hi-Pon Epoxy Thinner					
APPLICATION METHOD		mmended for application. Brud small areas. Care must be ta					
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.018" – 0 : 140 – 170				
	Typical Thickness	: 100 – 200 μm dry film 155 – 310 μm wet film					
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)	: 25°C : 30 mins : 4 hrs : 7 days : 8 hrs : 21 days	40°C 20 mins 3 hrs 3 days 5 hrs 14 days			
	t be considered as guideline ing may be shorter or longe	r, depending	on film thickness,				

Protective Coatings

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.



HI-PON 80-03 EPOXY PHENOLIC PRIMER

RECOMMENDED PAINTING SYSTEM	 The following coating system is recommended for Hi-Pon 80-03 Epoxy Phenolic Primer: Topcoat Hi-Pon 80-04 Epoxy Phenolic 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			
	5L	4.3L	5L	0.7L	1L			
	20L	17.2L	20L	2.8L	5L			
	the shelf life also shorten	and may lea the shelf life. ly closed cor	itainer in a dry, cool an	Frequent ter	mperature cycles may			
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 flushed with water and seek 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. 							

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HI-PON 80-04 EPOXY PHENOLIC TOPCOAT

PRODUCT DESCRIPTION	Hi-Pon 80-04 Epoxy Phenolic Topcoat is a two-pack epoxy phenolic coating for blast cleaned and primed steel surfaces. Its wide range of chemical resistance properties has made it a durable, high performance coating for steelwork and concrete surface with immersion as well as non-immersion services.							
INTENDED USE	It is designed for long-term corrosion protection lining of storage tank for a wide range of chemicals, solvents, crude oil, aggressive palm oil and vegetable oil derivatives.							
GENERAL PROPERTIES	Colour: White, GreyGloss Level: MattVolume Solids, %: 65 ± 2%Specific Gravity: 1.40 kg/l (Mixed)Flash Point: Base: 13.3°CHardener: 35°CMix: 13.3°CVOC: 350 g/L (EPA Method 24)Typical Thickness: 100 – 200 µm dry film 155 – 310 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. <u>Damaged Area</u> 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 80-04. Hi-Pon 80-04 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 80-04 must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> 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 over 85%. The temperature of steel surface must be a minimum 3°C above dew point of surrounding air. Ensure proper ventilation to have air movement to remove solvent.							

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Protective Coatings



APPLICATION

GUIDE

Mixing Ratio

Pot Life

HI-PON 80-04 EPOXY PHENOLIC TOPCOAT

Base and hardener should be mixed thoroughly before use.

: Base:Hardener = 6:1 (by volume)



HI-PON 80-04 EPOXY PHENOLIC TOPCOAT

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 reduc the shelf life and may lead to gelling in the tin. Frequent temperature cycles ma also shorten the shelf life.
	Store in tightly closed container in a dry, cool and well ventilated space, keep awa from sources of heat and ignition.
SAFETY PRECAUTION	 This product is intended for use of professional applicators. Refer to the safet information display on the container and in the safety data sheet (SDS) befor using the product.
	 Use this product in well-ventilated area, avoid skin contact, spillage on the ski should immediately be removed with suitable cleanser, soap and water.
	 Eye should be well flushed with water and seek medical attention immediatel upon contact with this product.
	 During the application, naked flame, welding operation and smoking is no allowed. Adequate ventilation should be provided.
	 If you have any doubt regarding the suitability of use, refer to Nippon Paint for further advice.

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		Vol	Container Size	Vol	Container Size
PACKAGING	Unit		Base	н	lardener
			system for different a oon Paint for professio		
SYSTEM	Primer • Hi-Pon 8	30-03 Epoxy	Phenolic Primer		
PAINTING	Top Coat:				
RECOMMENDED		g coating sys	stem is recommended	for Hi-Pon 8	0-04 Epoxy Phenoli
	where all par	ameters and	I special conditions co		
	ventilation, h mechanical s	umidity, und strength etc.	erlying paint system, A complete system ca	requirement f an be describe	or early handling an ed on a system sheet
			considered as guidel nay be shorter or lon		
		Di	ry to Recoat (max)	: 21 day	rs 14 days
		Di	ry to Recoat (min)	: 8 hrs	5 hrs
			nrough Dry ured	: 4 hrs : 10 day	3 hrs s 7 days
	Drying raite	Si	urface Dry	: 30 min	is 20 mins
	Drying Time		ubstrate Temperature	: 25°C	40°C
	Typical Thic		00 – 200 µm dry film 55 – 310 µm wet film		
DETAILS	·	- Pr	essure at Nozzle	: 140 – 1	170 kg/cm ²
APPLICATION	Airless Spra	iyy ∶Ti	p Size	: 0.018"	- 0.026"
	film thicknes	6.			
APPLICATION METHOD	for stripe coa	ting and sma	nded for application. all areas. Care must be		
	Ininner	: 11	-Pon Epoxy minner		
	Coverage Thinner		2 m²/litre at 200 µm Dl -Pon Epoxy Thinner	FT	
	Theoretical		5 m²/litre at 100 µm DI		
	FOLLINE	. 20	hrs		

: 25°C

PACKAGING	Unit		Base	ŀ	lardener
		Vol Container Size		Vol	Container Size
	5L	4.3L	5L	0.7L	1L
	20L	17.2L	20L	2.8L	5L



HI-PON 80-07 NOVOLAC VINYL ESTER PRIMER

PRODUCT DESCRIPTION	Hi-Pon 80-07 Novolac Vinyl Ester Primer is a two-pack, chemical resistant novolac-based vinyl ester coating. It is designed to promote adhesion to properly prepared carbon steel and concrete substrates. Suitable for use as primer in atmospheric and immersed environments.						
INTENDED USE	It is used as primer for polyester and vinyl ester coating systems. Designed for use in the internal lining of chemical storage tanks and pipes, and for structural steelwork in environments where superior resistance to chemical attack is required. Suitable for use in most aggressive environments.						
GENERAL PROPERTIES	Colour : Translucent Purple Gloss Level : Not Applicable Volume Solids, % : 100% Reactive (~ 75 % of contents are convertible to solid) Specific Gravity : 1.04 kg/l (Mixed) Flash Point : Base: 32°C Hardener: 57°C Mix: 32°C VOC : 235 g/L (EPA Method 24) Typical Thickness : 50 – 75 µm dry film 67 – 100 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. <u>Abrasive Blast Cleaning</u> 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 75 – 100 microns (3 – 4 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. <u>Other Surfaces</u> 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. When surface temperatures exceed 35°C, Hi-Pon 80-07 should be overcoated as soon as hard dry to avoid intercoat adhesion problems.						

HI-PON 80-07 NOVOLAC VINYL ESTER PRIMER

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NIPPON PAINT

Mixing Ratio : Base:Hardener = 56.3:1 (by volume)							
	Base and hardener should be mixed thorough before use						
Pot Life	: 25°C 35°C						
	30 mins 20 mins						
(Pot life will vary substantially with temperature							
Theoretical Coverage	: 7.50 m²/L at 100 µm DFT						
Thinner	: Do not thin						
Cleaner	: Hi-Pon Vinyl Ester Thinner						
		ush and roller are recommende aken to achieve the specified dr					
Airless Spray	: Tip Size Pressure at Nozzle	: 0.019" – 0.025" : >70 kg/cm² Concrete					
Typical Thickness							
Typical Thekness	50 – 75 µm dry film	50 – 125 µm dry film					
	67 – 100 µm wet film	67 – 167 µm wet film					
Drying Time	: Substrate Temperature	: 25°C 40°C					
	Surface Dry	: 1 hr 45 mins					
	Through Dry	: 3 hrs 2 hrs					
	Cured*	: 5 days 3 days					
		: 3 hrs 2 hrs					
	Dry to Recoat (max)*	: 5 days 3 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.							
The following paint system is recommended for Hi-Pon 80-07 Novolac Vinyl Ester Primer:							
Topcoat ∙ Hi-Pon 80-08 N	ovolac Vinyl Ester GF						
	times before recoati ventilation, humidity and mechanical str system sheet, where The following paint s Primer: Topcoat • Hi-Pon 80-08 No For the choice of coa	times before recoating may be shorter or longe ventilation, humidity, underlying paint system, and mechanical strength etc. A complete sy system sheet, where all parameters and specia The following paint system is recommended for H Primer:					



HI-PON 80-07 NOVOLAC VINYL ESTER PRIMER

PACKAGING	Unit		Base		Hardener		
		Vol	Container Size	Vol	Container Size		
	20L	19.61L	20L	0.39L	1L		
STORAGE	Shelf Life		art A: 5 months minimu art B: 5 months minimu				
	the shelf life		hereafter. Higher temp d to gelling in the tin.				
	from sources 10°C - 15°C	s of heat and	ntainer in a dry, cool an d ignition. Recommen nelf life for Base only. E ocations.	ided storage	temperature range		
SAFETY PRECAUTION	informat		led for use of profession n the container and in				
		Use this product in well-ventilated area, avoid skin contact, spillage on the ski should immediately be removed with suitable cleanser, soap and water.					
		 Eye should be well flushed with water and seek medical attention immediatel upon contact with this product. 					
		 During the application, naked flame, welding operation and smoking allowed. Adequate ventilation should be provided. 					
	 If you have any doubt regarding the suitability of use, refer to Nippon Paint fo further advice. 						

DISCLAIMER

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HI-PON 80-08 NOVOLAC VINYL ESTER GF

PRODUCT DESCRIPTION	Hi-Pon 80-08 Novolac Vinyl Ester GF is a two-pack, high build and chemical resistant novolac vinyl ester coating, reinforced with glass flakes. Suitable for properly prepared carbon steel and concrete substrates in atmospheric and immersed environments.							
INTENDED USE	It is designed for use in the internal lining of chemical storage tanks and pipes, and for structural steelwork in environments where superior resistance to chemical attack is required. Suitable for use in most aggressive environments. Excellent resistance in both aliphatic and aromatic organic solvents, and concentrated organic and inorganic acids.							
GENERAL PROPERTIES	Colour : Off-White, Grey Gloss Level : Semi-gloss Volume Solids, % : 100% Reactive (~ 85 % of contents are convertible to solid) Specific Gravity : 1.27 kg/l (Mixed) Flash Point : Base: 32°C Hardener: 57°C Mix: 32°C VOC : 245 g/L (EPA Method 24) Typical Thickness : 400 – 600 µm dry film 471 – 706 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 $2\frac{1}{2}$ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 75 – 100 microns (3 – 4 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. When surface temperatures exceed 35°C, Hi-Pon 80-08 should be overcoated as soon as hard dry to avoid intercoat adhesion problems.							

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Protective Coatings



APPLICATION

APPLICATION

APPLICATION

RECOMMENDED

PAINTING

SYSTEM

METHOD

DETAILS

GUIDE

HI-PON 80-08 NOVOLAC VINYL ESTER GF



HI-PON 80-08 NOVOLAC VINYL ESTER GF

Mixing Ratio	: Base:Hardener = 50.3:1 (b	by volume)		PACKAGING	Unit		Base		Hardener
	Base and hardener should	d be mixed thorough before	use.			Vol	Container Size	Vol	Container Size
Pot Life	: 25°C 35°C 55 mins 25 mins (Pot life will vary substanti	ally with temperature)			20L	19.61L	20L	0.39L	5L
Theoretical Coverage	: 1.70 m²/litre at 500 µm DF			STORAGE	Shelf Life		art A: 5 months minim art B: 5 months minim		
Thinner Cleaner	: Do not thin : Hi-Pon Vinyl Ester Thinner	r				and may lea	ad to gelling in the tin.		ng storage may reduce mperature cycles may
	commended for application. E areas. Care must be taken t				from source	s of heat an to prolong sh	d ignition. Recommen	ided storage	ated space, keep away e temperature range is would be to store Part
Airless Spray	: Tip Size Pressure at Nozzle	: 0.036" – 0.048" : >220 kg/cm²		SAFETY PRECAUTION					ors. Refer to the safety ata sheet (SDS) before
Typical Thickness	: 500 – 600 μm dry film 588 – 706 μm wet film			PRECAUTION	using th	e product.			
Drying Time	: Substrate Temperature Surface Dry Through Dry Cured* Dry to Recoat (min)* Dry to Recoat (max)* st be considered as guidelin	: 25°C 35°C : 2 hrs 1.5 hrs : 5 hrs 3 hrs : 5 days 3 days : 5 hrs 3 hrs : 5 days 3 days es only. The actual dryini	time/		 Should i Eye sho upon co During t 	mmediately to uld be well fl intact with th the application	be removed with suitabushed with water and a sproduct.	ole cleanser, s seek medica ling operatio	act, spillage on the skin soap and water. I attention immediately on and smoking is not
times before recoa ventilation, humidit mechanical strengt	ting may be shorter or longe y, underlying paint system, re h etc. A complete system can rs and special conditions cou	er, depending on film thic quirement for early handli be described on a system	kness, ig and		If you had further a		ot regarding the suitabi	lity of use, re	fer to Nippon Paint for
Ester GF:	t system is recommended f rmally applied directly to stee rrimers.			the general suitability of the p suitability of the product for th no implied conditions, warran obtain by using the product. In previously advised of it. In line information in this data sheet v	roduct for their needs a ne user's particular use. ties or other terms will a n no event will Nippon Pa with Nippon Paint's pol without prior notice. It is	nd specific applic The condition of t pply to the Produc aint be liable to the licy for continuous the user's response	knowledge and practical experie tation practices though it remain the substrate and application ar ct. Nippon Paint does not and o user for any kind of loss (whet s development, Nippon Paint res sibility to check with Nippon Pain any inconsistency, the English ve	ns each user's res e not within Nippo annot warrant the her direct or indire- serves the right to ht for the latest ver	ponsibility to determine the on Paint's control. Therefore results which the user may ct) even if Nippon Paint was modify the product and the rsion of this data sheet. This
Primer ▪ Hi-Pon 80-07	Novolac Vinyl Ester Primer								

For the choice of coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation.

	from sources of heat and ignition. Recommended storage temperature range is 10°C - 15°C to prolong shelf life for Base only. Best practice would be to store Part A and Part B in separate locations.
TY CAUTION	 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 flushed with water and seek 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.


HI-PON 80-09 NOVOLAC VINYL ESTER GF

PRODUCT DESCRIPTION	Hi-Pon 80-09 Novolac Vinyl Ester GF is a three-pack, high abrasion and chemical resistant novolac vinyl ester coating, reinforced with glass flakes. Suitable for properly prepared carbon steel and concrete substrates in atmospheric and immersed environments.
INTENDED USE	It is designed for use in the internal lining of chemical storage tanks and pipes, and for structural steelwork in environments where superior resistance to chemical attack is required. Suitable for use in most aggressive environments. Excellent resistance in both aliphatic and aromatic organic solvents, and concentrated organic and inorganic acids.
GENERAL PROPERTIES	Colour : Limited Colours Gloss Level : Semi-gloss Volume Solids, % : 100% Reactive (~ 85 % of contents are convertible to solid) Specific Gravity : 1.28 kg/l (Mixed) Flash Point : Base: 33°C Hardener: 70°C Mix: 33°C VOC : 42 g/L (EPA Method 24) Typical Thickness : 300 – 350 µm dry film 353 – 412 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. <u>Abrasive Blast Cleaning</u> 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 75 – 100 microns (3 – 4 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. <u>Other Surfaces</u> 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 surface must be minimum 3°C above dew point of surrounding air. When surface temperatures exceed 35°C, Hi-Pon 80-09 should be overcoated as soon as hard-dry to avoid intercoat adhesion problems.



HI-PON 80-09 NOVOLAC VINYL ESTER GF

APPLICATION GUIDE	Mixing Ratio	: Base:Accelerator:Hardene (by weight)	r = 100:0.4:1.8		
		Base and Accelerator sho adding Hardener.	uld be mixed thoroughly before		
	Pot Life	: 25°C 35°C 55 mins 35 mins (Pot life will vary substantia	ally with temperature)		
	Theoretical : 0.55 kg/m² at 350 μm DFT Coverage				
	Thinner	: Do not thin			
	Cleaner	: Hi-Pon Vinyl Ester Thinner			
APPLICATION METHOD			rush is recommended for stripe o achieve the specified dry film		
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.036" – 0.048" : >220 kg/cm²		
	Typical Thickness	: 300 – 350 μm dry film 353 – 412 μm wet film			
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured* Dry to Recoat (min)* Dry to Recoat (max)*	: 25°C 35°C : 2 hrs 1.5 hrs : 5 hrs 3 hrs : 3 days 3 days : 5 hrs 3 hrs : 3 days 3 days		
	times before recoal ventilation, humidit and mechanical st	ting may be shorter or longe y, underlying paint system, trength etc. A complete sy	es only. The actual drying time/ r, depending on film thickness, requirement for early handling stem can be described on a I conditions could be included.		
RECOMMENDED PAINTING	The following paint system is recommended for Hi-Pon 80-09 Novolac Vinyl Ester GF:				
SYSTEM	Hi-Pon 80-09 is nor over the following p		, however, it can also be applied		
		inyl Ester Steel Primer inyl Ester Concrete Primer			
		coating system for different a t Nippon Paint for professiona	pplication, refer to the product I recommendation.		



HI-PON 80-09 NOVOLAC VINYL ESTER GF

PACKAGING	B	ase	Accel	Accelerator		Hardener	
	Weight	Container Size	Container Size	Weigh	Vol	Container Size	
	20kg	20L	0.08kg	0.1L	0.36kg	0.5L	
STORAGE	Shelf Life		e elerator dener	: 4 months : 6 months : 6 months	s (25°C)		
	the shelf life	-inspection the and may lead the shelf life.					
	from sources	ly closed conta s of heat and to prolong she pocations	ignition. Reco	mmended st	orage tempe	rature range i	
		Jourioner					
•	informat	duct is intende ion display on e product.					
• • • • • •	informat using the Use this	duct is intende ion display on	the container	and in the sa	fety data she	et (SDS) before age on the skir	
• • • • • •	 Informat using the Use this should in Eye should 	duct is intende ion display on e product. product in wel	the container I-ventilated are removed with	and in the sa ea, avoid skin suitable clea	fety data she contact, spill nser, soap an	et (SDS) before age on the skin d water.	
• • • • • •	Informat Use this should in Eye should upon co During t	duct is intende ion display on e product. product in wel mmediately be uld be well flus	the container I-ventilated are removed with shed with wate product.	and in the sa ea, avoid skin suitable clea r and seek m e, welding op	fety data she contact, spill nser, soap an redical attenti reration and s	et (SDS) befor age on the skin d water. on immediatel	
SAFETY PRECAUTION	informat using the Use this should in Eye shou upon co During t allowed.	duct is intende ion display on e product. product in wel mmediately be uld be well flus ntact with this he application Adequate ven elerator should BPO, etc). Mixir	the container I-ventilated are removed with shed with wate product. , naked flame tilation should never be mixe	and in the sa ea, avoid skin suitable clea r and seek m r, welding op be provided. d directly with	contact, spill nser, soap an ledical attenti eration and s	et (SDS) befor age on the skin d water. on immediatel smoking is no atalyst (such a	

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HI-PON 80-10 VINYL ESTER STEEL PRIMER

PRODUCT DESCRIPTION	Hi-Pon 80-10 Vinyl Ester Steel Primer is a three-pack, chemical resistant vinyl ester coating. It is designed to promote adhesion to properly prepared carbon steel. Suitable for use as primer in atmospheric and immersed environments.				
INTENDED USE	It is used as primer for polyester and vinyl ester coating systems. Designed for use in the internal lining of chemical storage tanks and pipes, and for structural steelwork in environments where superior resistance to chemical attack is required. Suitable for use in most aggressive environments.				
GENERAL PROPERTIES	Colour: Translucent PurpleGloss Level: Not ApplicableVolume Solids, %: 100% Reactive (~70 % of contents are convertible to solid)Specific Gravity: 1.03 kg/l (Mixed)Flash Point: Base: 33°CVOC: 271 g/L (EPA Method 24)Typical Thickness: 50 – 100 µm dry film 72 – 143 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 $2\frac{1}{2}$ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 75 – 100 microns (3 – 4 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. When surface temperatures exceed 35°C, Hi-Pon 80-10 should be overcoated as soon as hard dry to avoid intercoat adhesion problems.				



HI-PON 80-10 VINYL ESTER STEEL PRIMER



HI-PON 80-10 VINYL ESTER STEEL PRIMER

APPLICATION GUIDE	Mixing Ratio		r = 100:0.45:2 ould be mixed thoroughly before	PACI
	Pot Life	adding Hardener. : 25°C 35°C 30 mins 20 mins (Pot life will vary substantia	ally with temperature)	
	Theoretical Coverage	: 0.20 kg/m ² at 100 µm DFT		STO
	Thinner	: Do not thin		
	Cleaner	: Hi-Pon Vinyl Ester Thinner		
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry	
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.019" – 0.025" : >70 kg/cm²	
DEIALO	Typical Thickness	: <u>Steel</u> 50 – 100 μm dry film 72 – 143 μm wet film	-	SAFE
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured* Dry to Recoat (min)* Dry to Recoat (max)*	: 25°C 35°C : 1 hr 1 hr : 6 hrs 4 hrs : 7 days 6 days : 6 hrs 4 hrs : 7 days 6 days	
	times before recoati ventilation, humidity, mechanical strength	ng may be shorter or longe underlying paint system, red	es only. The actual drying time/ r, depending on film thickness, quirement for early handling and be described on a system sheet, Id be included.	
RECOMMENDED PAINTING	The following paint s Primer:	system is recommended for	Hi-Pon 80-10 Vinyl Ester Steel	
SYSTEM	Topcoat • Hi-Pon 80-09 No • Hi-Pon 80-12 Vir	ovolac Vinyl Ester GF nyl Ester Lining		DISC The i the g
		bating system for different a Nippon Paint for professiona	pplication, refer to the product al recommendation.	suita no in obtai previ

PACKAGING	Ba	ise	Accelerator		Har	Hardener		
	Weight	Container Size	Container Size	Weigh	Vol	Container Size		
	15kg	20L	67.5g	0.1L	0.30kg	0.5L		
ORAGE		Han-	elerator dener ereafter. Highe		s (25°C) s (25°C) e during stora			
	also shorten t		to gelling in t	ne tin. Frequ	ent temperati	ure cycles ma		
AFETY RECAUTION	from sources 10°C - 15°C t in separate lo . This proc informati	of heat and o prolong shel cations.	ainer in a dry, c ignition. Reca f life for Base o d for use of pr the container	ommended st only. Best pra	orage tempe ctice would b plicators. Ref	rature range e to store the er to the safe		
		 Use this product in well-ventilated area, avoid skin contact, spillage on the skin should immediately be removed with suitable cleanser, soap and water. 						
					•			
		IId be well flus	hed with wate product.	r and seek m	edical attenti	on immediate		
	upon cor • During th	ntact with this		, welding op	eration and s			
	 Upon cor During the allowed. The accession 	ntact with this ne application Adequate ven lerator should PO, etc). Mixin	product. , naked flame	e, welding op be provided. d directly with	eration and s	smoking is no atalyst (such a		

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HI-PON 80-11 VINYL ESTER CONCRETE PRIMER

PRODUCT DESCRIPTION	Hi-Pon 80-11 Vinyl Ester Concrete Primer is a three-pack, chemical resistant vinyl ester coating. It is designed to promote adhesion to properly prepared concrete substrates. Suitable for use as primer in atmospheric and immersed environments.				
INTENDED USE	It is used as primer for polyester and vinyl ester coating systems. Designed for use in the internal lining of chemical storage tanks and pipes, and for structural steelwork in environments where superior resistance to chemical attack is required. Suitable for use in most aggressive environments.				
GENERAL PROPERTIES	Colour : Translucent Purple Gloss Level : Not Applicable Volume Solids, % : 100% Reactive (~ 70 % of contents are convertible to solid) Specific Gravity : 1.03 kg/l (Mixed) Flash Point : Base: 33°C Hardener: 60°C Mix: 33°C VOC : 429 g/L (EPA Method 24) Typical Thickness : 50 – 100 µm dry film 72 – 143 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. <u>Concrete</u> Abrasive blasting or scarification to remove laitance and surface contaminants is recommended. Concrete must be thoroughly cured and dry at time of application. It must be free of oils, curing solutions, dust and mold release agents. Use ASTM D 4263 (plastic sheet test method) to ensure concrete is moisture free. If moisture is detected, re-test until dry. <u>Other Surfaces</u> 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 surface must be minimum 3°C above dew point of surrounding air. When surface temperatures exceed 35°C, Hi-Pon 80-11 should be overcoated as soon as hard dry to avoid intercoat adhesion problems.				



HI-PON 80-11 VINYL ESTER CONCRETE PRIMER

APPLICATION GUIDE	Mixing Ratio Pot Life Theoretical Coverage Thinner	 Base:Accelerator:Hardener = 100:0.4:1.8 (by weight) Base and Accelerator should be mixed thoroughly before adding Hardener. 25°C 35°C 30 mins 20 mins (Pot life will vary substantially with temperature) 0.20 kg/m² at 100 µm DFT Do not thin 			
	Cleaner	: Hi-Pon Vinyl Ester Thinner			
APPLICATION METHOD			ish and roller are recommended ken to achieve the specified dry		
APPLICATION	Airless Spray	: Tip Size Pressure at Nozzle	: 0.019" – 0.025" : >70 kg/cm²		
DETAILS	Typical Thickness		. 210 kg/cm		
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured* Dry to Recoat (min)* Dry to Recoat (max)*	: 25°C 35°C : 1 hr 1 hr : 6 hrs 4 hrs : 7 days 6 days : 6 hrs 4 hrs : 7 days 6 days		
	times before recoat ventilation, humidity mechanical strength	ing may be shorter or longer , underlying paint system, rec	es only. The actual drying time/ r, depending on film thickness, juirement for early handling and be described on a system sheet, d be included.		
RECOMMENDED PAINTING SYSTEM	Primer: Topcoat • Hi-Pon 80-09 N • Hi-Pon 80-12 Vi For the choice of co	ovolac Vinyl Ester GF nyl Ester Lining	-Pon 80-11 Vinyl Ester Concrete		



HI-PON 80-11 VINYL ESTER CONCRETE PRIMER

PACKAGING	В	Base		Accelerator		dener
	Weight	Container Size	Weight	Container Size	Weight	Container Size
	20kg	20L	0.08kg	0.1L	0.36kg	0.5L
STORAGE	Shelf Life		e elerator lener	: 6 months : 6 months : 6 months	(25°C)	
	the shelf life	-inspection the and may lead the shelf life.				
	from sources	ly closed conta s of heat and to prolong shell ocations.	gnition. Reco	ommended sto	orage temper	rature range is
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. 					
••••	informat	ion display on t				
•··· = · ·	informat using th • Use this	ion display on t	he container	and in the safe	ety data shee contact, spill	et (SDS) before age on the skir
•··· = · ·	informat using th Use this should in Eye sho	ion display on t e product. product in well	ventilated ar removed with	and in the safe ea, avoid skin a suitable clean	ety data shee contact, spilla ser, soap and	et (SDS) before age on the skir d water.
•··· = · ·	informat using th Use this should in Eye sho upon co	ion display on the product. product in well mmediately be uld be well flusi	he container -ventilated ar removed with ned with wate product. naked flame	and in the safe ea, avoid skin on suitable clean er and seek me e, welding ope	ety data shee contact, spilla ser, soap and edical attentio	et (SDS) before age on the skir d water. on immediatel
••••	informat using th Use this should ii Eye sho upon co During t allowed.	ion display on the product in well mmediately be uld be well flush ntact with this product in the application, Adequate vent elerator should apply. Mixin	he container -ventilated ar removed with ned with wate product. naked flame ilation should never be mixe	and in the safe ea, avoid skin o a suitable clean er and seek me e, welding ope d be provided. ed directly with	ety data shee contact, spilla ser, soap and edical attention eration and s a peroxide ca	et (SDS) before age on the skir d water. on immediately smoking is no atalyst (such as

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HI-PON 80-12 VINYL ESTER LINING

PRODUCT DESCRIPTION	Hi-Pon 80-12 Vinyl Ester Lining is a three-pack, high chemical resistant vinyl ester coating, with inert fillers and fibreglass reinforcement. Suitable for properly prepared carbon steel and concrete substrates in atmospheric and immersed environments.
INTENDED USE	It is designed for use in the internal lining of chemical storage tanks and pipes, and for structural steelwork in environments where superior resistance to chemical attack is required. Suitable for use in most aggressive environments. Excellent resistance in both aliphatic and aromatic organic solvents, and concentrated organic and inorganic acids.
GENERAL PROPERTIES	Colour : Translucent Purple Gloss Level : Semi-gloss Volume Solids, % : 100% Reactive (~ 85 % of contents are convertible to solid) Specific Gravity : 1.05 kg/l (Mixed) Flash Point : Base: 33°C Hardener: 57°C Mix: 33°C VOC : 429 g/L (EPA Method 24)
COATING THICKNESS	 Basecoat (Base + Talcum Powder) One layer at 150 – 300 µm dry film (176 – 353 µm wet film) Theoretical coverage of 0.40 kg/m² at 300 µm DFT Laminate (Base saturated reinforced mat) Two layers chopped strand mat at 1600 – 1800 µm dry film (1882 – 2117 µm wet film) Theoretical coverage of 2.20 kg/m² at 1800 µm DFT A glassfiber surface mat with Base at 150 – 200 µm dry film (176 – 235 µm wet film) Theoretical coverage of 0.30 kg/m² at 200 µm DFT Topcoat (Base only) One or two layers at 75 – 100 µm dry film each (88 – 117 µm wet film each) Theoretical coverage of 0.30 kg/m² at 200 µm DFT
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. <u>Abrasive Blast Cleaning</u> 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 75 – 100 microns (3 – 4 mils). If oxidation has occurred between the blasting and

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HI-PON 80-12 VINYL ESTER LINING

SURFACE PREPARATION	visual standard. S ground, filled or the <u>Concrete</u> Abrasive blasting recommended. C It must be free of D 4263 (plastic sh is detected, re-ter <u>Other Surfaces</u> The coating may	Abrasive blasting or scarification to remove laitance and surface contaminan recommended. Concrete must be thoroughly cured and dry at time of applicat It must be free of oils, curing solutions, dust and mold release agents. Use AS D 4263 (plastic sheet test method) to ensure concrete is moisture free. If mois is detected, re-test until dry.				
CONDITION DURING APPLICATION	is above 80%. The temperature of air. When surface	cation when the temperature is I of surface must be minimum 3°C temperatures exceed 35°C, Hi- dry to avoid intercoat adhesion	above dew point o Pon 80-12 should b	fsurrounding		
APPLICATION GUIDE	Mixing Ratio	: Base:Accelerator:Hardene Base and Accelerator sho		U ,		
0.0122		adding Hardener.		Jugiliy Delote		
	Pot Life	: 25°C 35°C 30 mins 20 mins (Pot life will vary substanti	ally with temperatur	e)		
	Thinner	: Do not thin	, ,	,		
	Cleaner	: Hi-Pon Vinyl Ester Thinner				
APPLICATION METHOD		ended for application of basec n saturant and smoothing liquic ilm thickness.				
APPLICATION DETAILS	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured* Dry to Recoat (min)* Dry to Recoat (max)*	: 25°C : 1 hr 15 mins : 4 hrs : 7 days : 4 hrs : 7 days	35°C 1 hr 3 hrs 7 days 3 hrs 7 days		





SAFETY

PRECAUTION

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could result.

further advice.

HI-PON 80-12 VINYL ESTER LINING

The accelerator should never be mixed directly with a peroxide catalyst (such as MEKP, BPO, etc). Mixing would cause a violent reaction, and a fire or explosion

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

HI-PON 200HT CUI



PRODUCT DESCRIPTION	Hi-Pon 200HT CUI is a two-pack 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: White, GreyGloss Level: MattVolume Solids, %: 64 ± 2%Specific Gravity: 1.46 kg/l (Mixed)Flash Point: Base: 13.3°CHardener: 35°CMix: 13.3°CVOC: 313 g/L (EPA Method 24)Typical Thickness: 100 – 200 µm dry film 156 – 313 µm wet film
SURFACE PREPARATION	 All surfaces should be clean 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. <u>Abrasive Blast Cleaning</u> 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. <u>Damage Area</u> Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). When abrasive blasting in small area is not possible, mechanical cleaning to St 3 (ISO 8501-1:2007) is acceptable. After the surface preparation, the application of Hi-Pon 200HT CUI can be performed. Hi-Pon 200HT CUI should be applied over a surface that is dry and free from all contamination and must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.

DISCLAIMER

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HI-PON 200HT CUI

CONDITION DURING APPLICATION		he temperature of steel surface r	is below 10°C and relative humidity nust be a minimum 3°C above dew
APPLICATION GUIDE	Mixing Ratio	: Base:Hardener = 6:1 (by Base and hardener shou	/ volume) uld be mixed thoroughly before use.
	Pot Life	: 25°C 4 hrs	
	Theoretical Coverage	: 6.4 m²/litre at 100 µm D 3.2 m²/litre at 200 µm D	
	Thinner	: Hi-Pon Epoxy Thinner	
APPLICATION METHOD		ing and small areas. Care must be	Brush and roller are recommended e taken to achieve the specified dry
APPLICATION DETAILS	Airless Spra	 Y : Tip Size Pressure at Nozzle 	: 0.018" – 0.026" : 140 – 170 kg/cm²
	Typical Thicl	(ness : 100 – 200 μm dry film 156 – 313 μm wet film	
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured* Dry to Recoat (min) Dry to Recoat (max)	: 25°C 40°C : 60 mins 30 mins : 6 hrs 4 hrs : 10 days 7 days : 6 hrs 4 hrs : 21 days 14 days
	times before ventilation, hu mechanical s	recoating may be shorter or lon imidity, underlying paint system,	lines only. The actual drying time/ iger, depending on film thickness, requirement for early handling and an be described on a system sheet, ould be included.
RECOMMENDED PAINTING SYSTEM	therefore not For the choic	recommended for application ov	t application, refer to the product
PACKAGING	Unit	Base	Hardener

PACKAGING	Unit	Base		ŀ	lardener
		Vol	Container Size	Vol	Container Size
	20L	17.1L	20L	2.9L	5L

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NIPPON PAINT	

HI-PON 200HT CUI

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 flushed with water and seek 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

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HI-PON 300HT CUI

PRODUCT DESCRIPTION	Hi-Pon 300HT Primer is a two-pack, high solids 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 and uninsulated pipework and process vessels operating at temperatures up to 260°C.				
GENERAL PROPERTIES	Colour : White, Grey Gloss Level : Matt Volume Solids, % : 80 ± 2% Specific Gravity : 1.56 kg/l (Mixed) Flash Point : Base: 13°C Hardener: 35°C Mix: 13.3°C VOC : 180 g/L (EPA Method 24) Mix: 13.2°C Typical Thickness : 100 - 200 μm dry film 125 - 250 μm wet film 125 - 250 μm wet film				
SURFACE PREPARATION	All surfaces should be clean 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. <u>Abrasive Blast Cleaning</u> 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. <u>Damaged Area</u> Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). When abrasive blasting in small area is not possible, mechanical cleaning to St 3 (ISO 8501-1:2007) is acceptable. After the surface preparation, the application of Hi-Pon 300HT CUI can be performed. Hi-Pon 300HT CUI should be applied over a surface that is dry and free from all contamination and must be applied within the overcoating intervals specified (refer to application section for details). <u>Other Surfaces</u> The coating may be used on other substrates. Please contact your local Nippon Paint office for more information.				



HI-PON 300HT CUI

CONDITION DURING APPLICATION		nperature of steel surface mu	below 10°C and relative humidity st be a minimum 3°C above dew		
APPLICATION	Mixing Ratio : Base:Hardener = 3.2:1 (by volume)				
GUIDE	Pot Life : 25°C 1 hr		be mixed thoroughly before use.		
	Theoretical Coverage	: 8.0 m²/litre at 100 μm DFT 4.0 m²/litre at 200 μm DFT			
	Thinner	: Hi-Pon Epoxy Thinner			
APPLICATION METHOD			ush and roller are recommended aken to achieve the specified dry		
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.018" – 0.026" : 140 – 170 kg/cm²		
	Typical Thickness	: 100 – 200 μm dry film 125 – 250 μm wet film			
	Drying Time	: Substrate Temperature Surface Dry Through Dry Cured Dry to Recoat (min) Dry to Recoat (max)	: 25°C 40°C : 2 hrs 1 hr : 7 hrs 5 hrs : 10 days 7 days : 7 hrs 5 hrs : 21 days 14 days		
	Freshly applied Hi-Pon 300HT Primer may have slightly reduced mechanical properties. This effect can however be overcome by heating the paint system to 200°C for 1 hour.				
	times before recoat ventilation, humidity mechanical strength	ing may be shorter or longe , underlying paint system, rec	es only. The actual drying time/ r, depending on film thickness, quirement for early handling and be described on a system sheet, Id be included.		
RECOMMENDED PAINTING SYSTEM	therefore not recom For the choice of c	mended for application over	application, refer to the product		



HI-PON 300HT CUI

PACKAGING	Unit	Base		Hardener			
		Vol	Container Size	Vol	Container Size		
	20L	15.2L		4.8L	5L		
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	informat		ded for use of professi n the container and in				
			ell-ventilated area, avo				
		Eye should be well flushed with water and seek 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.						
	a If you be	ave any doub	t regarding the suitabi	ility of use, re	efer to Nippon Paint fo		

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HI-PON 300HT PRIMER

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HI-PON 300HT PRIMER



HI-PON 300HT PRIMER

APPLICATION	Mixing Ratio	Mixing Ratio : Mixed thoroughly before use with a power agitator.			
GUIDE	Theoretical Coverage	: 20.0 m²/litre at 20 μm DFT : 13.3 m²/litre at 30 μm DFT			
	Thinner		-Pon HT Thinner		
APPLICATION METHOD		nded f	or stripe coating and sr	ended for application. Brush and nall areas. Care must be taken to	
APPLICATION DETAILS	Airless Spray		p Size ressure at Nozzle	: 0.015" – 0.017" : 140 – 170 kg/cm²	
	Typical Thicknes) – 30 µm dry film) – 75 µm wet film		
	Drying Time	Si Tř Di	ubstrate Temperature urface Dry nrough Dry ry to Recoat (min) ry to Recoat (max)	: 25°C 40°C : 0.5 hrs 0.2 hrs : 2 hrs 1 hr : 2 hrs 1 hr : 30 days 14 days	
	properties. This ef 200°C for 1 hour. The given data mi times before reco ventilation, humidi mechanical streng	fect ca ust be ating n ty, und th etc.	an however be overcom considered as guidelin nay be shorter or long erlying paint system, re	we slightly reduced mechanica te by heating the paint system to the only. The actual drying time, er, depending on film thickness equirement for early handling and be described on a system sheet ald be included.	
RECOMMENDED PAINTING SYSTEM	Coating System • • Hi-Pon 300HT • Hi-Pon 300HT For the choice of	Primer Top Co coatin	stem is recommended: , 1 coat x 25 μm dry film pat, 2 coats x 30 μm dry g system for different on Paint for professional	r film thickness application, refer to the produc	
	brochure or contac				
PACKAGING		/ol	Container Size		
PACKAGING	Unit	/ol .8L	Container Size 5L		
PACKAGING	Unit	-			

STORAGE	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 him educely be removed with suitable cleansel, soap and water. Eye should be well flushed with water and seek 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

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HI-PON 300HT TOPCOAT

NIPPON PAINT

PRODUCT DESCRIPTION	Hi-Pon 300HT Topcoat is a one-pack, silicone acrylic based coating which can withstand dry heat temperature up to 300°C.			
INTENDED USE	It is designed for use as a top coat for long-term corrosion protection of steel exposed to high temperature (below 300°C). Suitable for use in exhaust manifolds, furnaces, boiler, chimneys and other installations exposed to high temperatures.			
GENERAL PROPERTIES	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$			
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 300HT Top Coat. Hi-Pon 300HT Top Coat would not normally be applied directly to steel surface and would only be considered where corrosion problems were insignificant but decoration important. For optimum anti corrosive performance, priming with Zinky-13 Inorganic Zinc Rich Primer 85 is recommended. It should be applied over a surface that is dry and free from dirt, grease, oil and other contaminants and 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	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			

HI-PON 300HT TOPCOAT

APPLICATION GUIDE	Mixing Ratio					
GOIDE	Theoretical Coverage	: 20.0 m²/litre at 20 μm DFT 13.3 m²/litre at 30 μm DFT				
	Thinner	Thinner : Hi-Pon HT Thinner				
	Thinning	: For mist coat application, u	use 10 – 15% thinner for dilution			
APPLICATION METHOD	roller are recommen		nded for application. Brush an nall areas. Care must be taken t			
APPLICATION DETAILS	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.017" : 140 – 170 kg/cm²			
	Typical Thickness	: 20 – 30 μm dry film 50 – 75 μm wet film				
	Drying Time	: Substrate Temperature Surface Dry Through Dry Dry to Recoat (min) Dry to Recoat (max)	: 25°C 40°C : 0.5 hrs 0.2 hrs : 2 hrs 1 hr : 2 hrs 1 hr : 30 days 14 days			
	Freshly applied Hi-Pon 300HT Top Coat may have slightly reduced mechanical properties. This effect can however be overcome by heating the paint system to 200°C for 1 hour. Due to differences in the thermal stability of pigments, slight colour changes can occur when the coating is heated but it will not affect the performance of the coating.					
	times before recoa ventilation, humidity mechanical strengt	ting may be shorter or longe y, underlying paint system, re	es only. The actual drying time er, depending on film thickness quirement for early handling an be described on a system shee Id be included.			
RECOMMENDED PAINTING SYSTEM	PrimerZinky-12 Inorga	ers are recommended for Hi-F unic Zinc Rich Primer 77 unic Zinc Rich Primer 85 Primer	Pon 300HT Topcoat:			
	Remarks: For maxin	Remarks: For maximum corrosion resistance, use a zinc silicate primer.				
	The following coatin	g systems are recommended:				
	Coating System 1 • Hi-Pon 300HT F	Primer, 1 coat x 25 µm dry film	ı thickness			

Protective Coatings

APPLICATION

point of surrounding air.



HI-PON 300HT TOPCOAT

SYSTEM	 Hi-Pon 300HT Top Coat, 2 coats x 25 um dry film thickness Coating System 2 Zinky-13 Inorganic Zinc Rich Primer 85, 1 coat x 50 µm dry film thickness Hi-Pon 300HT Top Coat, mist coat x 15 µm dry film thickness Hi-Pon 300HT Top Coat, 1 coat x 30 µm dry film thickness For the choice of coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation. 			
PACKAGING	Unit	Vol	Container Size]
	4.8L	4.8L	5L]
	the shelf life	and may lea		perature during storage may reduce . Frequent temperature cycles may
			ntainer in a dry, cool a	nd well ventilated space, keep away

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HI-PON 600HT TOPCOAT

PRODUCT DESCRIPTION	Hi-Pon 600HT Topcoat is a one-pack, silicone based coating which c withstand dry heat temperature up to 540°C.
INTENDED USE	It is designed for use as a top coat for long-term corrosion protection of st exposed to high temperature (below 540°C). Suitable for use in exhaust manifol furnaces, boiler, chimneys and other installations exposed to high temperature
GENERAL PROPERTIES	Colour : Aluminium (up to 540°C) Black (up to 400°C)
	Gloss Level : Semi-gloss
	Volume Solids, % $\therefore 40 \pm 2\%$
	Specific Gravity : 1.11 – 1.21 kg/l, depending on colours
	Flash Point : 7°C
	VOC : 506 g/l (EPA Method 24)
	Typical Thickness : 20 – 30 µm dry film
	50 – 75 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 removed in accordance with SSPC-SP1 solvent cleaning. Damaged Area Damage area should be prepared with abrasive blast cleaning to Sa 2½ (I8501-1:2007). When abrasive blasting is not possible, mechanical cleaning to S (ISO 8501-1:2007) is acceptable. After the surface preparation, patch primer prito the application of Hi-Pon 600HT Top Coat. Hi-Pon 600HT Top Coat would not normally be applied directly to steel surfare and would only be considered where corrosion problems were insignificant I decoration important. For optimum anti corrosive performance, priming w Zinky-13 Inorganic Zinc Rich Primer 85 is recommended. It should be applied over a surface that is dry and free from dirt, grease, oil and other contaminaria and must be applied within the overcoating intervals specified (refer to applicat section for details). Other Surfaces The coating may be used on other substrates. Please contact your local Nipp Paint office for more information.
CONDITION DURING APPLICATION	Avoid paint application when the temperature is below 10°C and relative humic is over 85%. The temperature of steel surface must be a minimum 3°C above d point of surrounding air.

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HI-PON 600HT TOPCOAT

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NIPPON PAINT	

HI-PON 600HT TOPCOAT

APPLICATION	Mixing Ratio	ife : None pretical : 0.0 m²/litre at 20 μm DFT prage 13.3 m²/litre at 30 μm DFT				
GUIDE	Pot Life					
	Theoretical					
	Coverage Thinner					
		: Hi-Pon HT Thinner				
	Thinning : For mist coat application, use 10 – 15% thinner for diluti					
APPLICATION METHOD	Conventional air and 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	Airless Spray	: Tip Size Pressure at Nozzle	: 0.015" – 0.017" : 140 – 170 kg/cm²			
220020	Typical Thickness	: 20 – 30 μm dry film 50 – 75 μm wet film				
	Drying Time	: Substrate Temperature	: 25°C 40°C			
		Surface Dry	: 0.5 hrs 0.2 hrs			
		Through Dry	: 2 hrs 1 hr			
		Dry to Recoat (min)	: 2 hrs 1 hr			
		Dry to Recoat (max)	: 30 days 14 days			
	Freshly applied Hi-Pon 600HT Top Coat may have slightly reduced mechanical properties. This effect can however be overcome by heating the paint system to 200°C for 1 hour.					
	Due to differences in the thermal stability of pigments, slight colour changes can occur when the coating is heated but it will not affect the performance of the coating.					
	times before recoat ventilation, humidity mechanical strength	ing may be shorter or longe , underlying paint system, rec	es only. The actual drying time/ r, depending on film thickness, quirement for early handling and be described on a system sheet, Id be included.			
RECOMMENDED	The following primers are recommended for Hi-Pon 600HT Top Coat:					
PAINTING SYSTEM	 Primer Zinky-12 Inorganic Zinc Rich Primer 77 Zinky-13 Inorganic Zinc Rich Primer 85 					
	Remarks: For maximum corrosion resistance, use a zinc silicate primer.					
	The following coating systems are recommended:					
	 Coating System 1 Hi-Pon 600HT Top Coat, 3 coats x 25 µm dry film thickness 					

RECOMMENDED PAINTING SYSTEM	 Coating System 2 Zinky-13 Inorganic Zinc Rich Primer 85, 1 coat x 50 µm dry film thickness Hi-Pon 600HT Top Coat, mist coat x 15 µm dry film thickness Hi-Pon 600HT Top Coat, 1 coat x 30 µm dry film thickness For the choice of coating system for different application, refer to the product brochure or contact Nippon Paint for professional recommendation. 			
PACKAGING	Unit	Vol	Container Size	
	4.8L	4.8L	5L	
STORAGE	the shelf life also shorten t	-inspection t and may lea the shelf life. y closed cor	d to gelling in the tin	perature during storage may reduc Frequent temperature cycles ma nd well ventilated space, keep awa
SAFETY PRECAUTION	 Informati using the Use this should in Eye shou upon cor During the 	on display o product. product in w nmediately b uld be well flu ntact with thi ne applicatio	n the container and in ell-ventilated area, avo re removed with suitabushed with water and s product.	onal applicators. Refer to the safet the safety data sheet (SDS) befor bid skin contact, spillage on the ski ble cleanser, soap and water. seek medical attention immediatel ting operation and smoking is no ovided.

DISCLAIMER

The information in this data sheet is given to the best of Nipon 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.



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