NIPPON PAINT | Protective Coatings

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)	
Typical Thickness	: 25 – 35 µm dry film	
	83 – 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.

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 Steel surface temperature must be minimum 3°C above dew point of the surrounding air.

APPLICATION GUIDE

Mixing Ratio : Base:Hardener = 18:0.4 (by volume)
Base and hardener should be mixed thoroughly before use.

Pot Life : 25°C
24 hrs

Theoretical Coverage : 12.0 m^2/litre at 25 µm DFT
8.6 m^2/litre at 35 µm DFT

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

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 the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.015" – 0.021"
Pressure at Nozzle : 100 – 150 kg/cm^2

Typical Thickness : 25 – 30 µm dry film
83 – 117 µm wet film

Drying Time

Substrate Temperature	: 25°C	40°C
Surface Dry	: 2 mins	30 sec
Through Dry	: 8 mins	4 mins
Cured	: 7 days	3 days
Dry to Recoat (min)	: 6 hrs	4 hrs
Dry to Recoat (max)*	: Extended	

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

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

Intermediate
- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63
- Hi-Pon 30-02 Epoxy MIO 80
- Hi-Pon 30-03 Epoxy Midcoat 80

Topcoat
- Hi-Pon 40-02 Epoxy Top Coat

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 product 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

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.

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

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)		
Typical Thickness	: 25 – 35 µm dry film 83 – 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.

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 20-09 EPOXY SHOP PRIMER FD AUTOBLAST

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener = 18:0.4 (by volume) Base and hardener should be mixed thoroughly before use.
Induction time	: 15 mins
Pot Life	: 25°C 24 hrs
Theoretical Coverage	: 12.0 m^2/litre at 25 µm DFT 8.6 m^2/litre at 35 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

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 the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.015" – 0.021"
Pressure at Nozzle : 100 – 150 kg/cm^2

Typical Thickness : 25 – 35 µm dry film
83 – 117 µm wet film

Drying Time

Substrate Temperature	: 25°C	40°C
Surface Dry	: 2 mins	30 sec
Through Dry	: 6 mins	3 mins
Cured	: 7 days	3 days
Dry to Recoat (min)	: 6 hrs	4 hrs
Dry to recoat (max)*	: Extended	

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following coatings systems are recommended for Hi-Pon 20-09 Epoxy Shop Primer FD Autoblast:

Intermediate
- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63
- Hi-Pon 30-02 Epoxy MIO 80
- Hi-Pon 30-03 Epoxy Midcoat 80

HI-PON 20-09 EPOXY SHOP PRIMER FD AUTOBLAST

RECOMMENDED PAINTING SYSTEM

Topcoat

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

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 by 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	Mix: 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 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
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 or touch ups)

Zinky-10 Inorganic Zinc Shop 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).

Other Surfaces
The coating should not be used on the other substrates. Please contact your local Nippon Paint office for more information.

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 5°C and above 45°C, or humidity is below 50%. Increase the humidity by spraying water when humidity is below 50%. To achieve the best film performance, humidity should be kept above 65%.

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 and be agitated with mechanical agitator.

Mixed paint should be filtered before apply and should be agitated during application.

Pot Life : 25°C
6 hrs

Theoretical Coverage : 25 m^2/litre at 13 µm DFT

Thinner : Zinky-1000 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. Avoid mud cracking.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.015" – 0.017"
Pressure at Nozzle : 50 – 100 kg/cm^2

Typical Thickness : 13 µm dry film
40 µm wet film

Drying Time

Substrate Temperature	: 25°C	40°C
Surface Dry	: 2 mins	2 mins
Through Dry	: 3 mins	3 mins
Cured*	: 3 days	3 days
Dry to Recoat (min)*	: 24 hrs	24 hrs

Remarks: All zinc salts should be removed prior to overcoating

*Depends on humidity conditions

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 system is recommended for Zinky-10:

On Sa 2½, 1 coat x 13 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.

ZINKY-10 INORGANIC ZINC SHOP PRIMER

PACKAGING

Unit	Base		Hardener	
	Vol	Container Size	Vol	Container Size
4.2L	1.5L	5L	2.7L	5L

STORAGE

Shelf Life : Part A: 6 months (25°C)
Part B: 6 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.

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 Mix: 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 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C 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

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.017" – 0.023"	
	Pressure at Nozzle	: 150 – 170 kg/cm^2	
Typical Thickness	: 75 – 250 µm dry film 103 – 342 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 2 hrs	1 hrs
	Through Dry	: 4 hrs	2 hrs
	Cured	: 7 days	3 days
	Dry to Recoat (min)	: 4 hrs	2 hrs
	Dry to Recoat (max)	: 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 PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 20-01 Epoxy Primer:

Intermediate
- Hi-Pon 20-01 Epoxy 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-Acryl 1901 Acrylic Top Coat
- Hi-Pon 40-02 Epoxy Topcoat
- Hi-Pon 40-04 Epoxy Topcoat
- 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 20-01 EPOXY PRIMER

PACKAGING

Unit	Base		Hardener	
	Vol	Container Size	Vol	Container Size
20L	15L	20L	5L	5L
5L	3.75L	5L	1.25L	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.
- 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 20-03 EPOXY RED OXIDE PRIMER

PRODUCT DESCRIPTION

Hi-Pon 20-03 Epoxy Red Oxide 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 : Reddish Brown
Gloss Level : Matt
Volume Solids, % : 50 ± 2%
Specific Gravity : 1.20 – 1.40 kg/l (Mixed)
Flash Point : Base: 7°C Hardener: 23°C Mix: 7°C
VOC : 512 g/L (EPA Method 24)
Typical Thickness : 60 – 80 µm dry film
120 – 160 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.

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 blast cleaned to Sa 2½ (ISO 8501- 1:2007).

Damaged 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.

Hi-Pon 20-03 Epoxy Red Oxide 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).

SURFACE PREPARATION

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.

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener = 9:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 6 hrs
Theoretical Coverage	: 6.2 m^2/litre at 80 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray

: Tip Size : 0.015" – 0.021"
Pressure at Nozzle : 140 – 170 kg/cm^2

Typical Thickness : 60 – 80 µm dry film
120 – 160 µm wet film

Drying Time

Substrate Temperature	: 25°C	40°C
Surface Dry	: 1 hr	0.5 hrs
Through Dry	: 6 hrs	3 hrs
Cured	: 7 days	3 days
Dry to Recoat (min)	: 6 hrs	3 hrs
Dry to Recoat (max)*	: Extended	

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

HI-PON 20-03 EPOXY RED OXIDE PRIMER

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 20-03 Epoxy Red Oxide Primer:

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 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.

HI-PON 20-03 EPOXY RED OXIDE 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.

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	: White		
Gloss Level	: Low-gloss		
Volume Solids, %	: 55 ± 2%		
Specific Gravity	: 1.25 – 1.38 kg/l (Mixed)		
Flash Point	: Base: 7°C	Hardener: 23°C	Mix: 7°C
VOC	: 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.

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.

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 blast cleaned to Sa 2½ (ISO 8501- 1:2007).

Damaged 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.

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).

SURFACE PREPARATION

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.

APPLICATION GUIDE

Mixing Ratio : Base:Hardener = 9:1 (by volume)
Base and hardener should be mixed thoroughly before use.

Pot Life : 25°C
5 hrs

Theoretical Coverage : 6.8 m^2/litre at 80 µm DFT

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.015" – 0.021"
Pressure at Nozzle : 140 – 170 kg/cm^2

Typical Thickness : 60 – 80 µm dry film
110 – 145 µm wet film

Drying Time

	25°C	40°C
Substrate Temperature		
Surface Dry	1 hr	0.5 hrs
Through Dry	6 hrs	3 hrs
Cured	7 days	3 days
Dry to Recoat (min)	6 hrs	3 hrs
Dry to Recoat (max)*	Extended	

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

HI-PON 20-03 EPOXY WHITE PRIMER

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 20-03 Epoxy White Primer:

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 40-04 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	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.

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.

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)	
Typical Thickness	: 100 – 250 µm dry film	
	143 – 357 µm wet film	

SURFACE PREPARATION

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning
Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C 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

HI-PON 20-07 EPOXY ZINC PHOSPHATE 70

APPLICATION GUIDE

Theoretical Coverage : 7.2 m^2/litre at 100 µm DFT
2.9 m^2/litre at 250 µm DFT

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : .017" – 0.027"
Pressure at Nozzle : 150 - 200 kg/cm^2

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

Drying Time

Substrate Temperature	25°C	40°C
Surface Dry	1 hr	0.5 hrs
Through Dry	3 hrs	1 hrs
Cured	7 days	3 days
Dry to Recoat (min)	3 hrs	1 hr
Dry to Recoat (max)	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.

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 20-07 Epoxy Zinc Phosphate 70:

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 20-07 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 : 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.
- If you have any doubt regarding the suitability of use, refer to Nippon Paint for further advice.

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

An anti-corrosive primer for protection of correctly prepared steel structures in atmospheric exposure. Suitable for use in both new construction and as an industrial maintenance primer.

GENERAL PROPERTIES

Colour	: Red		
Gloss Level	: Matt		
Volume Solids, %	: 63 ± 2%		
Specific Gravity	: 1.43 kg/l (Mixed)		
Flash Point	: Base: 23°C	Hardener: 23°C	Mix: 23°C
VOC	: 360 g/L (EPA Method 24)		
Typical Thickness	: 50 – 80 µm dry film 79 – 127 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.

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 blast cleaned to Sa 2½ (ISO 8501- 1:2007).

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.

Hi-Pon 20-10 Epoxy Zinc Phosphate 63 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).

HI-PON 20-10 EPOXY ZINC PHOSPHATE 63

SURFACE PREPARATION

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 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 thoroughly before use.
Pot Life	: 25°C 5 hrs
Theoretical Coverage	: 7.88 m^2/litre at 80 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

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 the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.015” – 0.021”	
	Pressure at Nozzle	: 150 - 200 kg/cm^2	
Typical Thickness	: 50 – 80 µm dry film 79 – 127 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 45 mins	30 mins
	Through Dry	: 3 hrs	2 hrs
	Cured	: 7 days	3 days
	Dry to Recoat (min)	: 3 hrs	2 hrs
	Dry to Recoat (max)	: 90 days	90 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

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
- 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		Hardener	
	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.

HI-PON 20-10 EPOXY ZINC PHOSPHATE 63

SAFETY PRECAUTION

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

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	: Grey
Gloss Level	: Matt
Volume Solids, %	: 58 ± 2%
Specific Gravity	: 2.18 kg/l (Mixed)
Flash Point	: Base: 22°C Mix: 22°C
VOC	: 556 g/L (EPA Method 24)
Typical Thickness	: 50 – 75 µm dry film 86 – 129 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-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

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 ensure curing.

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener 0.685:1 (by weight) 4.5:1 (by volume) Add zinc powder (Hardener) into Base and mix thoroughly before use.
Pot Life	: 25°C 4 hrs
Theoretical Coverage	: 11.6 m^2/litre at 50 µm DFT 7.73 m^2/litre at 75 µm DFT
Thinner	: Zinky-2000 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. Avoid mud cracking.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.015” – 0.023”	
	Pressure at Nozzle	: 120 – 150 kg/cm^2	
Typical Thickness	: 50 – 75 µm dry film 86 – 129 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.

ZINKY-12 INORGANIC ZINC RICH PRIMER 77

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 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
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-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.

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.

ZINKY-13 INORGANIC ZINC RICH PRIMER 85

CONDITION DURING APPLICATION

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 ensure curing.

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener 0.426:1 (by weight) 2.8:1 (by volume) Add zinc powder (Hardener) into Base and mix thoroughly before use.
Pot Life	: 25°C 4 hrs
Theoretical Coverage	: 12.4 m^2/litre at 50 µm DFT 8.2 m^2/litre at 75 µm DFT
Thinner	: Zinky-2000 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. Avoid mud cracking.

APPLICATION DETAILS

Airless Spray
: Tip Size : 0.015” – 0.023”
Pressure at Nozzle : 120 – 150 kg/cm^2

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 SYSTEM

The following coating systems are recommended for Zinky-13 Inorganic Zinc Rich Primer 85:

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
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

- 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.

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

Colour	: Grey		
Gloss Level	: Matt		
Volume Solids, %	: 58 ± 2%		
Specific Gravity	: 2.27 kg/l (Mixed)		
Flash Point	: Base: 23°C	Hardener: 23°C	Mix: 23°C
VOC	: 432 g/L (EPA Method 24)		
Typical Thickness	: 50 – 80 µm dry film 85 – 138 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 blast cleaned to Sa 2½ (ISO 8501- 1:2007).

Damaged 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-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).

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 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	: Base:Hardener 2.9:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 6 hrs
Theoretical Coverage	: 11.6 m^2/litre at 50 µm DFT 7.2 m^2/litre at 80 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray
: Tip Size : 0.015" – 0.021"
Pressure at Nozzle : 120 – 150 kg/cm^2

Typical Thickness : 50 – 80 µm dry film
85 – 138 µm wet film

Drying Time

: Substrate Temperature	: 10°C	25°C	40°C
Surface Dry	: 1 hr	0.3 hrs	0.2 hrs
Through Dry	: 8 hrs	3 hrs	2 hrs
Cured*	: 14 days	7 days	3 days
Dry to Recoat (min)	: 8 hrs	3 hrs	2 hrs
Dry to Recoat (max)*	: 3 mths	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.

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Zinky-21 Epoxy 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 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 : 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-21 EPOXY ZINC RICH PRIMER 77

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.

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	: Grey		
Gloss Level	: Matt		
Volume Solids, %	: 65 ± 2%		
Specific Gravity	: 2.62 kg/l (Mixed)		
Flash Point	: Base: 23°C	Hardener: 23°C	Mix: 23°C
VOC	: 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.

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 blast cleaned to Sa 2½ (ISO 8501- 1:2007).

Damaged 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-22.

ZINKY-22 EPOXY ZINC RICH PRIMER 80

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).

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 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	: Base:Hardener 3.8:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 6 hrs
Theoretical Coverage	: 13.0 m^2/litre at 50 µm DFT 8.1 m^2/litre at 80 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.015” – 0.021”		
	Pressure at Nozzle	: 120 – 150 kg/cm^2		
Typical Thickness	: 50 – 80 µm dry film 77 – 123 µm wet film			
Drying Time	: Substrate Temperature	: 10°C	25°C	40°C
	Surface Dry	: 1 hr	0.3 hrs	0.2 hrs
	Through Dry	: 8 hrs	3 hrs	2 hrs
	Cured	: 14 days	7 days	3 days
	Dry to Recoat (min)	: 8 hrs	3 hrs	2 hrs
	Dry to Recoat (max)*	: 3 mths	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.

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Zinky-22 Epoxy Zinc Rich Primer 80:

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	7.9L	14L	2.1L	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.
- During the application, naked flame, welding operation and smoking is not allowed. Adequate ventilation should be provided.

SAFETY PRECAUTION

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

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

Colour	: Grey		
Gloss Level	: Matt		
Volume Solids, %	: 65 ± 2%		
Specific Gravity	: 2.86 kg/l (Mixed)		
Flash Point	: Base: 23°C	Hardener: 23°C	Mix: 23°C
VOC	: 416 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.

Abrasive Blast Cleaning
Abrasive blast cleaning to Sa $2^{1}/_{2}$ (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 blast cleaned to Sa $2^{1}/_{2}$ (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. 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 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	: Base:Hardener = 3.5:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 4 – 6 hrs
Theoretical Coverage	: 13.0 m^2/litre at 50 µm DFT 8.1 m^2/litre at 80 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.015” – 0.021”	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
Typical Thickness	: 50 – 80 µm dry film 77 – 123 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 10 mins	6 mins
	Through Dry	: 4 hrs	3 hrs
	Cured	: 3 days	2 days
	Dry to Recoat (min)	: 4 hrs	3 hrs
	Dry to Recoat (max)*	: 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.

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Zinky-23 Epoxy Zinc Rich Primer 85:

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	7.8L	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 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 23 EPOXY ZINC RICH PRIMER 85

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.

ZINKY-25 EPOXY ZINC PRIMER 45

PRODUCT DESCRIPTION

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

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	: 1.40 – 1.50 kg/l (Mixed)	
Flash Point	: Base: 23°C	Hardener: 13°C Mix: 23°C
VOC	: 535 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 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 blast cleaned to Sa 2½ (ISO 8501- 1:2007).

Damaged 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-25.

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).

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.

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener = 4:1 (by volume)
	Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 6 – 8 hrs
Theoretical Coverage	: 12.0 m^2/litre at 50 µm DFT 7.5 m^2/litre at 80 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.015” – 0.021”	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
Typical Thickness	: 50 – 80 µm dry film		
	83 – 133 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 10 mins	6 mins
	Through Dry	: 4 hrs	3 hrs
	Cured	: 7 days	4 days
	Dry to Recoat (min)	: 8 hrs	5 hrs
	Dry to Recoat (max)*	: 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.

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Zinky-25 Epoxy Zinc Primer 45:

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
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-25 EPOXY ZINC PRIMER 45

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.

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	Mix: 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 blast cleaned to Sa 2½ (ISO 8501- 1:2007).

Damaged 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

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).

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 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	: Base:Hardener = 3:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 6 hrs
Theoretical Coverage	: 12.0 m^2/litre at 50 µm DFT 7.5 m^2/litre at 80 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.015" – 0.021"
Pressure at Nozzle : 120 – 150 kg/cm^2

Typical Thickness : 50 – 80 µm dry film
83 – 133 µm wet film

Drying Time

Substrate Temperature	10°C	25°C	40°C
Surface Dry	1 hr	0.3 hrs	0.2 hrs
Through Dry	8 hrs	3 hrs	2 hrs
Cured	14 days	7 days	3 days
Dry to Recoat (min)	8 hrs	3 hrs	2 hrs
Dry to Recoat (max)*	3 mths	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

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Zinky-26 Epoxy Zinc Primer 65:

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	7.5L	20L	2.5L	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.
- During the application, naked flame, welding operation and smoking is not allowed. Adequate ventilation should be provided.

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.

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

Remark

Multiple spray pass to achieve 100 – 120 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.

Abrasive Blast Cleaning

Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

Other Surfaces

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C and relative humidity is above 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 Coverage	: 4.0 m^2/litre at 50 µm DFT 3.3 m^2/litre at 60 µm DFT

HI-VINYL 1201 ZINC PHOSPHATE 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	: Tip Size	: 0.011" – 0.018"	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
Typical Thickness	: 50 – 60 µm dry film 250 – 300 µm wet film		

Remark

Multiple spray pass to achieve 100 – 120 µm DFT

Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 12 mins	6 mins
	Through Dry	: 55 mins	35 mins
	Dry to Recoat (min)	: 2.5 hrs	1 hr
	Dry to Recoat (max)	: 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.

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)		
Typical Thickness	: 70 – 200 µm dry film 87 – 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.

Bare Steel
Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C 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

APPLICATION GUIDE

Theoretical Coverage : 11.4 m^2/litre at 70 µm DFT
4.0 m^2/litre at 200 µm DFT

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.015" – 0.023"
Pressure at Nozzle : 150 – 170 kg/cm^2

Typical Thickness : 70 – 200 µm dry film
87 – 250 µm wet film

Drying Time

Substrate Temperature	25°C	40°C
Surface Dry	3 hrs	1.5 hrs
Through Dry	7 hrs	3.5 hrs
Cured	7 days	3 days
Dry to Recoat (min)	7 hrs	3.5 hrs
Dry to Recoat (max)	7 days	3 days
Dry to Recoat (max) by self*	Extended	

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 20-04 STE 80:

Intermediate
- 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 20-04 STE MIO 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

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
19.6L	16.8L	20L	2.8L	5L
4.9L	4.2L	5L	0.7L	1L

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.

HI-PON 20-04 STE AL 80

PRODUCT DESCRIPTION

Hi-Pon 20-04 STE AL 80 is a two-pack, surface-tolerant, high solids epoxy mastic coating pigmented with aluminium 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	: Aluminium		
Gloss Level	: Semi-gloss		
Volume Solids, %	: 80 ± 2%		
Specific Gravity	: 1.53 kg/l (Mixed)		
Flash Point	: Base: 23°C	Hardener: 93°C	Mix: 23°C
VOC	: 178 g/L (EPA Method 24)		
Typical Thickness	: 70 – 200 µm dry film		
	87 – 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.

Bare Steel
Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C 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
Theoretical Coverage	: 11.4 m²/litre at 70 µm DFT
	4.0 m²/litre at 200 µm DFT

HI-PON 20-04 STE AL 80

APPLICATION GUIDE

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.017" – 0.031"	
	Pressure at Nozzle	: 150 – 200 kg/cm²	
Typical Thickness	: 70 – 200 µm dry film		
	87–250 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 4 hrs	2 hrs
	Through Dry	: 10 hrs	4 hrs
	Cured	: 7 days	2 days
	Dry to Recoat (min)	: 10 hrs	4 hrs
	Dry to Recoat (max)	: 7 days	3 days
	Dry to Recoat (max) by self*	: Extended	

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 20-04 STE AL 80:

Intermediate
- 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 20-04 STE MIO 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-PON 20-04 STE AL 80

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
19.6L	16.8L	20L	2.8L	5L
4.9L	4.2L	5L	0.7L	1L

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.

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.

Abrasive Blast Cleaning
Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C 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

APPLICATION GUIDE

Theoretical Coverage : 6.4 m²/litre at 125 µm DFT
3.2 m²/litre at 250 µm DFT

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.019" – 0.035"
Pressure at Nozzle : 150 – 200 kg/cm²

Filters should be removed from spray equipment prior to spraying because of glass flake

Typical Thickness : 125 – 250 µm dry film
156 – 313 µm wet film

Drying Time

Substrate Temperature	25°C	40°C
Surface Dry	7 hrs	2 hrs
Through Dry	10 hrs	4 hrs
Cured	7 days	3 days
Dry to Recoat (min)	10 hrs	4 hrs
Dry to Recoat (max)	7 days	3 days
Dry to Recoat (max) by self*	Extended	

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 20-04 STE GF 80:

Intermediate
- 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 20-04 STE MIO 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

RECOMMENDED PAINTING SYSTEM

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
19.6L	16.8L	20L	2.8L	5L
4.9L	4.2L	5L	0.7L	1L

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.

HI-PON 20-04 STE IM 80

PRODUCT DESCRIPTION

Hi-Pon 20-04 STE IM 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 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, including portable water.

GENERAL PROPERTIES

Colour	: Grey & Off-White		
Gloss Level	: Semi-gloss		
Volume Solids, %	: 80 ± 2%		
Specific Gravity	: 1.78 kg/l (Mixed)		
Flash Point	: Base: 23°C	Hardener: 96°C	Mix: 23°C
VOC	: 214 g/L (EPA Method 24)		
Typical Thickness	: 70 – 200 µm dry film 87 – 250 µm wet film		

SURFACE PREPARATION

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning
Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C 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 thorough before use.
Pot Life	: 25°C 2 hrs
Theoretical Coverage	: 11.4 m^2/litre at 70 µm DFT 4.0 m^2/litre at 200 µm DFT

HI-PON 20-04 STE IM 80

APPLICATION GUIDE

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.015” – 0.023”	
	Pressure at Nozzle	: 150 – 170 kg/cm^2	
Typical Thickness	: 70 – 200 µm dry film 87 – 250 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 4 hrs	2 hrs
	Through Dry	: 10 hrs	4 hrs
	Cured	: 7 days	3 days
	Dry to Recoat (min)	: 10 hrs	4 hrs
	Dry to Recoat (max)	: 7 days	3 days
	Dry to Recoat (max) by self*	: Extended	

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 20-04 STE IM 80:

Intermediate
- 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 20-04 STE MIO 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-PON 20-04 STE IM 80

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
19.6L	16.8L	20L	2.8L	5L
4.9L	4.2L	5L	0.7L	1L

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.

HI-PON 20-04 STE MIO 80

PRODUCT DESCRIPTION

Hi-Pon 20-04 STE MIO 80 is a two-pack, surface-tolerant, high solids epoxy mastic coating pigmented with micaceous iron oxide. 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
Gloss Level : Semi-gloss
Volume Solids, % : 80 ± 2%
Specific Gravity : 1.58 kg/l (Mixed)
Flash Point : Base: 23°C Hardener: 93°C Mix: 23°C
VOC : 168 g/L (EPA Method 24)
Typical Thickness : 70 – 200 µm dry film
87 – 250 µm wet film

SURFACE PREPARATION

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning
Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C 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
Theoretical Coverage : 11.4 m^2/litre at 70 µm DFT
4.0 m^2/litre at 200 µm DFT

APPLICATION GUIDE

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.017" – 0.031"
Pressure at Nozzle : 150 – 200 kg/cm^2

Typical Thickness : 70 – 200 µm dry film
87–250 µm wet film

Drying Time

	25°C	40°C
Substrate Temperature		
Surface Dry	4 hrs	2 hrs
Through Dry	10 hrs	4 hrs
Cured	7 days	2 days
Dry to Recoat (min)	10 hrs	4 hrs
Dry to Recoat (max)	7 days	3 days
Dry to Recoat (max) by self*	Extended	

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 20-04 STE MIO 80:

Intermediate
- 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 20-04 STE MIO 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-PON 20-04 STE MIO 80

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
19.6L	16.8L	20L	2.8L	5L
4.9L	4.2L	5L	0.7L	1L

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.

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		

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.

Shop Primer Surface
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.

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.

Hi-Pon 20-14 Epoxy U-Coat 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 relevant product data sheet)

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

HI-PON 20-14 EPOXY U-COAT

CONDITION DURING APPLICATION

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

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener = 2.2:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 1.5 hrs
Theoretical Coverage	: 7.3 m^2/litre at 100 µm DFT 3.6 m^2/litre at 200 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.017" – 0.031"	
	Pressure at Nozzle	: >200 kg/cm^2	
Typical Thickness	: 100 – 200 µm dry film 140 – 280 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 2 hrs	1.5 hrs
	Through Dry	: 3.5 hrs	3 hrs
	Cured	: 7 days	4 days
	Dry to Recoat (min)	: 3.5 hrs	3 hrs
	Dry to Recoat (max)	: 7 days	4 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 Topcoats are recommended for Hi-Pon 20-14 Epoxy U-Coat:

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 20-14 EPOXY U-COAT

PACKAGING

Unit	Base		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 : 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.

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 Mix: 23°C
VOC : 200 g/L (EPA Method 24)
Typical Thickness : 80 – 200 µm dry film
100 – 250 µm wet film

SURFACE PREPARATION

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Damaged Area
Damage area should be prepared with abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007). When abrasive blasting is not possible, mechanical cleaning to St 3 (ISO 8501-1:2007) is acceptable. After the surface preparation, patch primer prior to the application of Hi-Pon 30-02 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.

APPLICATION GUIDE

Mixing Ratio : Base:Hardener = 2.6:1 (by volume)
Base and hardener should be mixed thoroughly before use.

Pot Life : 25°C
1.5 hrs

Theoretical Coverage : 10.0 m^2/litre at 80 µm DFT
4.0 m^2/litre at 200 µm DFT

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.017" – 0.031"
Pressure at Nozzle : 180 – 200 kg/cm^2

Typical Thickness : 80 – 200 µm dry film
100 – 250 µm wet film

Drying Time

Substrate Temperature	: 25°C	40°C
Surface Dry	: 1.5 hrs	0.5 hrs
Through Dry	: 3.5 hrs	1 hr
Cured	: 7 days	3 days
Dry to Recoat (min)	: 3.5 hrs	1 hr
Dry to Recoat (max)*	: Extended	

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 30-02 Epoxy MIO 80:

Primer
- 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
- Hi-Pon 20-01 Epoxy Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-04 STE 80

HI-PON 30-02 EPOXY MIO 80

RECOMMENDED PAINTING SYSTEM

- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-07 Epoxy Zinc Phosphate 70
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63

Topcoat
- Hi-Pon 40-02 Epoxy Top Coat
- Hi-Pon 40-04 Epoxy Top Coat
- Hi-Pon 50-01 Polyurethane Top Coat
- Hi-Pon 50-03 Polyurethane Top Coat

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
17L	12.3L	20L	4.7L	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.
- 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 30-02 EPOXY MIO 80

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 30-03 EPOXY MIDCOAT 80

PRODUCT DESCRIPTION

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

INTENDED USE

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

GENERAL PROPERTIES

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

SURFACE PREPARATION

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Hi-Pon 30-03 Epoxy Midcoat 80 should always be applied over a recommended anti-corrosive coating scheme for metal surface. The primer surface should be dry and free from oil and other contaminations. It must be applied within the overcoating intervals specified (refer to application section for details).

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

CONDITION DURING APPLICATION

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

APPLICATION GUIDE

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

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.017" – 0.031"
Pressure at Nozzle : 180 – 200 kg/cm^2

Typical Thickness : 80 – 200 µm dry film
100 – 250 µm wet film

Drying Time

	25°C	40°C
Substrate Temperature		
Surface Dry	1.5 hrs	0.5 hrs
Through Dry	3.5 hrs	1 hr
Cured	7 days	3 days
Dry to Recoat (min)	3.5 hrs	1 hr
Dry to Recoat (max)*	Extended	

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

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

Primer

- Zinky-12 Inorganic Zinc Rich Primer 77
- Zinky-13 Inorganic Zinc Rich Primer 85
- Zinky-21 Epoxy Zinc Rich Primer 77
- Zinky-22 Epoxy Zinc Rich Primer 80
- Hi-Pon 20-01 Epoxy Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-07 Epoxy Zinc Phosphate 70
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63

Topcoat

- Hi-Pon 40-02 Epoxy Top Coat
- Hi-Pon 40-04 Epoxy Top Coat
- Hi-Pon 50-01 Polyurethane Top Coat
- Hi-Pon 50-03 Polyurethane Top Coat
- Hi-Floro 6738 Fluorocarbon Top Coat

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

PACKAGING

Unit	Base		Hardener	
	Vol	Container Size	Vol	Container Size
17L	12.7L	20L	4.3L	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.
- 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 30-04 EPOXY MIO 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

Colour	: Grey Black, Dark Grey and Silver	
Gloss Level	: Matt	
Volume Solids, %	: 70 ± 2%	
Specific Gravity	: 1.65 - 1.75 kg/l (Mixed)	
Flash Point	: Base: 23°C	Hardener: 13.3°C Mix: 13.3°C
VOC	: 378 g/L (EPA Method 24)	
Typical Thickness	: 50 – 100 µm dry film	
	70 – 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.

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 30-04 Epoxy MIO 70.

Hi-Pon 30-04 Epoxy MIO 70 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 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 MIO 70

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener = 4:1 (by volume)
	Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C
	6 hrs
Theoretical Coverage	: 7.0 m^2/litre at 100 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.017" – 0.031"	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
Typical Thickness	: 50 – 100 µm dry film		
	70 – 145 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 3 hrs	2 hrs
	Through Dry	: 16 hrs	10 hrs
	Cured	: 7 days	4 days
	Dry to Recoat (min)	: 16 hrs	10 hrs
	Dry to Recoat (max)*	: Extended	

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following Intermediate/Topcoats are recommended for Hi-Pon 30-04:

Primer
- 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
- Hi-Pon 20-01 Epoxy Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-07 Epoxy Zinc Phosphate 70
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63

HI-PON 30-04 EPOXY MIO 70

EPOXY & MID COAT

RECOMMENDED PAINTING SYSTEM

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
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. 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.

HI-PON 80-05 EPOXY TL 70

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 of storage tank for selective palm oil derivatives & vegetable oil with FDA 21 CFR Part 175.300 compliance and BS 6920 potable water at 60°C approval.

GENERAL PROPERTIES

Colour	: White, Grey	
Gloss Level	: Semi-gloss	
Volume Solids, %	: 70 ± 2%	
Specific Gravity	: 1.77 kg/l (Mixed)	
Flash Point	: Base: 23°C	Hardener: 31°C Mix: 23°C
VOC	: 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-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 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
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 GUIDE

Mixing Ratio : Base:Hardener = 4.56:1 (by volume)
Base and hardener should be mixed thoroughly before use.

Pot Life : 25°C
1 hr

Theoretical Coverage : 7.0 m^2/litre at 100 µm DFT
4.7 m^2/litre at 150 µm DFT

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.018" – 0.026"
Pressure at Nozzle : 140 – 170 kg/cm^2

Typical Thickness : 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	5 hrs	3 hrs
Cured	7 days	4 days
Dry to Recoat (min)	5 hrs	3 hrs
Dry to Recoat (max)	2 mths	1 mth

Pin hole detection is required to ensure a pin hole free system.

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 80-05 Epoxy TL 70:

Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-03 Epoxy White primer

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

HI-PON 80-05 EPOXY TL 70

PACKAGING

Unit	Base		Hardener	
	Vol	Container Size	Vol	Container Size
20L	16.4L	20L	3.6L	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.
- 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 90-01 EPOXY GLASS FLAKE HB 95

PRODUCT DESCRIPTION

Hi-Pon 90-01 Epoxy Glass Flake HB 95 is a two-pack, low VOC, high solids, high build epoxy coating, reinforced with glass flakes. It provides excellent corrosion protection and has good abrasion resistance. Suitable for seawater immersion.

INTENDED USE

It is designed for use in highly corrosive environments, such as offshore structures, refineries, power plants, bridges, chemical plants, tanks external and for structural steelwork in atmospheric and immersed environments.

GENERAL PROPERTIES

Colour	: Grey, White		
Gloss Level	: Gloss		
Volume Solids, %	: 95 ± 3%		
Specific Gravity	: 1.44 kg/l (Mixed)		
Flash Point	: Base: 13.3°C	Hardener: 93°C	Mix: 13.3°C
VOC	: 42 g/L (EPA Method 24)		
Typical Thickness	: 300 – 625 µm dry film 316 – 658 µm wet film		

SURFACE PREPARATION

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning
Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C or 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	: Base:Hardener = 2:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 50 mins

HI-PON 90-01 EPOXY GLASS FLAKE HB 95

APPLICATION GUIDE

Theoretical Coverage	: 3.1 m^2/litre at 300 µm DFT 1.5 m^2/litre at 625 µm DFT
Thinner	: Normally not recommended

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.021" – 0.035"
Pressure at Nozzle : >200 kg/cm^2

Filters should be remove from spray equipment prior to spraying because of glass flake

Typical Thickness : 300 – 625 µm dry film
316 – 658 µm wet film

Drying Time

Substrate Temperature	: 25°C	40°C
Surface Dry	: 4.5 hrs	2 hrs
Through Dry	: 10 hrs	4 hrs
Cured	: 7 days	3 days
Dry to Recoat (min)	: 10 hrs	4 hrs
Dry to Recoat (max)	: 7 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.

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 90-01 Epoxy Glass Flake HB 95:

Hi-Pon 90-01 is normally applied directly to steel; however, it can also be applied over the following primers.

Shop Primer
- Zinky-10 Inorganic Zinc Shop Primer

Primer
- Zinky-13 Inorganic Zinc Rich Primer 85 (mist coat is required)
- 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 90-01 Epoxy Glass Flake HB 95
- Hi-Pon 40-02 Epoxy Top Coat

HI-PON 90-01 EPOXY GLASS FLAKE HB 95

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 product brochure or contact Nippon Paint for professional recommendation.

PACKAGING

Unit	Base		Hardener	
	Vol	Container Size	Vol	Container Size
15L	10L	20L	5L	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.
- 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 90-05 EPOXY HB 85

PRODUCT DESCRIPTION

Hi-Pon 90-05 Epoxy HB 85 is a two-pack, surface-tolerant, high solids modified epoxy coating. It has excellent cathodic disbondment resistance and will continue 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		

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.

Hand or Power Tool Preparation
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.

Ultra High Pressure Hydroblasting/Abrasive Wet Blasting
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.

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 4°C and relative humidity is above 85%. The temperature of steel surface must be minimum 3°C above dew point of surrounding air.

In special cases where overcoating is required and curing has been at low temperature and high relative humidity, ensure no amine bloom is present prior to application of subsequent coats.

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener = 4:1 (by volume) Base and hardener should be mixed thorough before use.
Pot Life	: 25°C 45 mins
Theoretical Coverage	: 3.4 m²/litre at 250 µm DFT 1.7 m2/litre at 500 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.021" – 0.026"
Pressure at Nozzle : >170 kg/cm²

Typical Thickness : 250 – 500 µm dry film
294 – 588 µm wet film

Drying Time

	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 4 hrs	1.5 hrs
	Through Dry	: 7 hrs	3 hrs
	Cured	: 6 days	3 days
	Dry to Recoat (min)	: 7 hrs	3 hrs
	Dry to Recoat (max)	: 7 days	4 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.

When applied between tides on piles and jetties, Hi-Pon 90-05 Epoxy HB 85 can be immersed after 30 minutes. Early immersion will lead to a slight whitening of colours, especially on darker colours. The anti-corrosive performance is however not affected.

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 90-05 Epoxy HB 85:

Hi-Pon 90-05 is normally applied directly to steel; however, it can also be applied over the following primers.

RECOMMENDED PAINTING SYSTEM

Shop Primer
- Zinky-10 Inorganic Zinc Shop Primer

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

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
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 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.

HI-PON 90-05 EPOXY HB 85

SAFETY PRECAUTION

- 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.

HI-PON 90-07 EPOXY GLASS FLAKE HB 93

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

It is designed for use in highly corrosive environments where high mechanical strength is required, such as areas in the splash or tidal zones. Suitable for properly prepared carbon steel substrates in both atmospheric and immersed environments. Recommended for offshore environments, refineries, power plants, bridges, mining equipments and general structural steels. Compatible with cathodic protection systems.

GENERAL PROPERTIES

Colour	: Black		
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

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

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener = 3.5:1 (by volume) Base and hardener should be mixed thorough before use.
Pot Life	: 25°C 55 mins

APPLICATION GUIDE

Theoretical Coverage : 1.86 m^2/litre at 500 µm DFT
0.93 m^2/litre at 1000 µm DFT

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.036" – 0.045"
Pressure at Nozzle : >215 kg/cm^2

Filters should be removed from spray equipment prior to spraying because of glass flake

Typical Thickness : 500 – 1000 µm dry film
537 – 1075 µm wet film

Drying Time

Substrate Temperature	25°C	40°C
Surface Dry	4.5 hrs	2 hrs
Through Dry	10 hrs	5 hrs
Cured*	7 days	4 days
Dry to Recoat (min)*	10 hrs	5 hrs
Dry to Recoat (max)*	7 days	4 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 system is recommended for Hi-Pon 90-07 Epoxy Glass Flake HB:

Hi-Pon 90-07 is normally applied directly to steel; however, it can also be applied over the following primers.

Shop Primer
- Zinky-10 Inorganic Zinc Shop Primer

Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-04 STE IM 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-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 : 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 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.

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 Mix: >100°C
VOC	: 20 g/L (EPA Method 24)	
Typical Thickness	: 75 – 125 µm dry film	
	150 – 250 µm wet film	

SURFACE PREPARATION

All surfaces should be clean, dry and free from contamination. The surface should be assessed and treated in accordance with ISO 8504. Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning.

Abrasive Blast Cleaning
Abrasive blast cleaning to Sa 2½ (ISO 8501-1:2007) or SSPC-SP6. For optimum performance, blast cleaned to SSPC-SP10 with a surface profile of 50 – 75 microns (2 – 3 mils). If oxidation has occurred between the blasting and application of this product, the surface should be re-blasted to the specified visual standard. Surface defect revealed by the blast cleaning process should be ground, filled or treated in the appropriate manner.

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

CONDITION DURING APPLICATION

Avoid paint application when the temperature is below 10°C and relative humidity is above 80%. The temperature of steel surface must be minimum 3°C above dew point of surrounding air.

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	: 4.00 m^2/litre at 125 µm DFT
Thinner	: Clean portable water

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.015" – 0.021"	
	Pressure at Nozzle	: >170 kg/cm^2	
Typical Thickness	: 75 – 125 µm dry film		
	150 – 250 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 1 hr	45 mins
	Through Dry	: 7 hrs	3 hrs
	Cured	: 7 days	5 days
	Dry to Recoat (min)	: 4 hrs	3 hrs
	Dry to Recoat (max)	: 7 days	5 days

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Dro 63-01 Universal Epoxy:

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

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

Topcoat
- Hi-Dro 60-01 Acrylic Sheen Top Coat
- Hi-Dro 60-02 Acrylic Gloss Top Coat
- Hi-Pon 40-04 Epoxy Top Coat
- Hi-Pon 50-01 Polyurethane Top Coat

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

HI-DRO 63-01 UNIVERSAL EPOXY

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 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.

HI-PON 40-02 EPOXY TOPCOAT

PRODUCT DESCRIPTION

Hi-Pon 40-02 Epoxy Topcoat is a two-pack amine-adduct cured epoxy finish coat specially developed to achieve long-term corrosion protection for many type of surfaces i.e. aluminium, galvanising, concrete and mild steel. This feature combined with its wide range of resistance properties make Hi-Pon 40-02 a durable, high performance and economical coating for non-immersion as well as 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)
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.

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 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).

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.

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener = 9:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 5 hrs
Theoretical Coverage	: 6.8 m^2/litre at 80 µm DFT 3.6 m^2/litre at 80 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.015" – 0.023"	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
Typical Thickness	: 80 – 150 µm dry film 150 – 275 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 1.5 hrs	0.5 hrs
	Through Dry	: 7 hrs	3 hrs
	Cured	: 7 days	3 days
	Dry to Recoat (min)	: 7 hrs	3 hrs
	Dry to Recoat (max)	: 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 PAINTING SYSTEM

The following Primers/Intermediates are recommended for Hi-Pon 40-02 Epoxy Top Coat:

Primer

- 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
- Hi-Pon 20-01 Epoxy Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-07 Epoxy Zinc Phosphate 70
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63

Intermediate

- Hi-Pon 20-04 STE 80

HI-PON 40-02 EPOXY TOPCOAT

RECOMMENDED PAINTING SYSTEM

- Hi-Pon 20-04 STE IM 80
- Hi-Pon 30-02 Epoxy MIO 80
- Hi-Pon 30-03 Epoxy Midcoat 80
- Hi-Pon 40-02 Epoxy 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	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.
- 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 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 Mix: 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.

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 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).

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 40-04 EPOXY TOPCOAT

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener = 4:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 6 hrs
Theoretical Coverage	: 10.2 m^2/litre at 50 µm DFT 5.1 m^2/litre at 100 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.015” – 0.023”	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
Typical Thickness	: 50 – 100 µm dry film 80 – 130 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 1.5 hrs	0.5 hrs
	Through Dry	: 7 hrs	3 hrs
	Cured	: 7 days	3 days
	Dry to Recoat (min)	: 7 hrs	3 hrs
	Dry to Recoat (max)	: 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 PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 40-04 Top Coat:

Primer
- 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
- Hi-Pon 20-01 Epoxy Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-07 Epoxy Zinc Phosphate 70
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63

Intermediate
- Hi-Pon 20-04 STE 80

HI-PON 40-04 EPOXY TOPCOAT

RECOMMENDED PAINTING SYSTEM

- Hi-Pon 20-04 STE AL 80
- Hi-Pon 20-04 STE GF 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-04 STE MIO 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
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. 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.

HI-PON 50-01 POLYURETHANE TOPCOAT

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 request
Gloss Level	:	High-gloss
Volume Solids, %	:	60 ± 2%
Specific Gravity	:	0.98 – 1.25 kg/l (Mixed) depending on colours
Flash Point	:	Base: 23°C Hardener: 23°C Mix: 23°C
VOC	:	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.

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 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).

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 50-01 POLYURETHANE TOPCOAT

APPLICATION GUIDE

Mixing Ratio	:	Base:Hardener = 4:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	:	25°C 2.5 hrs
Theoretical	:	12.0 m^2/litre at 50 µm DFT
Theoretical		7.5 m^2/litre at 80 µm DFT
Thinner	:	Hi-Pon PU 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

Tip Size	:	0.011" – 0.018"
Pressure at Nozzle	:	140 – 170 kg/cm^2

Typical Thickness : 50 – 80 µm dry film
83 – 133 µm wet film

Drying Time

Substrate Temperature	: 25°C	40°C
Surface Dry	: 1 hr	0.5 hrs
Through Dry	: 7 hrs	4 hrs
Cured	: 5 days	2 days
Dry to Recoat (min)	: 7 hrs	4 hrs
Dry to Recoat (max)*	: Extended	

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following Primers/Intermediates are recommended for Hi-Pon 50-01 Polyurethane Top Coat:

Primer
- 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 50-01 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
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. 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.

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	Hardener: 23°C	Mix: 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.

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 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 GUIDE

Mixing Ratio	: Base:Hardener = 5:1 (by volume)
	Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C
	4 hrs
Theoretical	: 11.6 m^2/litre at 50 µm DFT
Theoretical	7.2 m^2/litre at 80 µm DFT
Thinner	: Hi-Pon PU 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	: Tip Size	: 0.011" – 0.018"	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
Typical Thickness	: 50 – 80 µm dry film		
	85 – 135 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 1 hr	0.5 hrs
	Through Dry	: 8 hrs	4 hrs
	Cured	: 7 days	4 days
	Dry to Recoat (min)	: 8 hrs	4 hrs
	Dry to Recoat (max)*	: Extended	

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Pon 50-03 Polyurethane Top Coat:

Primer
- 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

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

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.

HI-ACRYL 1901 ACRYLIC TOPCOAT

PRODUCT DESCRIPTION

Hi-Acryl 1901 Acrylic Topcoat is a one-pack, fast-drying acrylic copolymer finish coat. It has good weatherability, hardness and abrasion resistance performance 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 Coverage	: 10.0 m^2/litre at 40 µm DFT 6.7 m^2/litre at 60 µm DFT

APPLICATION GUIDE

Thinner : Hi-Pon Acrylic 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 : Tip Size : 0.011" – 0.018"
Pressure at Nozzle : 140 – 170 kg/cm^2

Typical Thickness : 40 – 60 µm dry film
100 – 150 µm wet film

Drying Time

Substrate Temperature	25°C	40°C
Surface Dry	25 mins	12 mins
Through Dry	4 hrs	2 hrs
Cured	4 hrs	2 hrs
Dry to Recoat (min)	4 hrs	2 hrs
Dry to Recoat (max)	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 systems are recommended for Hi-Acryl 1901 Acrylic Top Coat:

Primer
- Hi-Vinyl 1201 Zinc Phosphate Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-07 Epoxy Zinc Phosphate 70
- Hi-Pon 90-01 Epoxy Glass Flake HB 95

Intermediate
- Hi-Pon 30-02 Epoxy MIO 80
- Hi-Pon 30-03 Epoxy Midcoat 80

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

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.

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 Mix: 13.3°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.

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-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).

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 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 m^2/litre at 40 µm DFT 7.6 m^2/litre at 60 µm DFT
Thinner	: Hi-Floro 6738 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 : Tip Size : 0.006” – 0.008”
Pressure at Nozzle : 100 – 150 kg/cm^2

Typical Thickness : 40 – 60 µm dry film
87 – 130 µm wet film

Drying Time

Substrate Temperature	10°C	25°C	40°C
Surface Dry	1 hr	0.5 hrs	0.3 hrs
Through Dry	10 hrs	4 hrs	2 hrs
Cured	10 days	7 days	3 days
Dry to Recoat (min)	10 hrs	4 hrs	2 hrs
Dry to Recoat (max)	2 weeks	2 weeks	2 weeks

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Floro 6738 Fluorocarbon Top Coat:

Primer
- 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 20-07 Epoxy Zinc Phosphate 70
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63

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

HI-FLORO 6738 FLUOROCARBON TOPCOAT

RECOMMENDED PAINTING SYSTEM

- 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
15L	14L	20L	1L	1L

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.

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).

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

HI-DRO 60-01 ACRYLIC SHEEN 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 : Mixed thoroughly before use with a power agitator.

Theoretical Coverage : 9.5 m^2/litre at 40 µm DFT
: 6.3 m^2/litre at 60 µm DFT

Thinner : Clean portable water

Ready for use, if necessary, dilution should not be more than 5% water

APPLICATION METHOD

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 : 0.015" – 0.021"
Pressure at Nozzle : >150 kg/cm^2

Typical Thickness : 40 – 60 µm dry film
105 – 158 µm wet film

Drying Time :

Substrate Temperature	: 30°C
Surface Dry	: 1 hr
Through Dry	: 4 hrs
Dry to Recoat (min)	: 4 hrs
Dry to Recoat (max)*	: Extended

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

HI-DRO 60-01 ACRYLIC SHEEN TOPCOAT

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Dro 60-01 Acrylic Sheen Top Coat:

Primer
- Hi-Pon 20-01 Epoxy Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer
- Hi-Pon 20-04 STE 80
- Hi-Pon 20-04 STE IM 80
- Hi-Pon 20-07 Epoxy Zinc Phosphate 70
- Hi-Pon 20-10 Epoxy Zinc Phosphate 63
- Hi-Dro 63-01 Universal Epoxy

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
- Talkalitt S100

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	Vol	Container Size
5L	5L	5L
20L	20L	20L

STORAGE

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 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.

HI-DRO 60-01 ACRYLIC SHEEN TOPCOAT

SAFETY PRECAUTION

- 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-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 colours
Gloss Level	: Gloss
Volume Solids, %	: 38 ± 2%
Specific Gravity	: 1.24 – 1.28 kg/l (Depending on colours)
Flash point	: >100°C
VOC	: 70 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 60-02 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.

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 : Mixed thoroughly before use with a power agitator.

Theoretical Coverage : 9.5 m^2/litre at 40 µm DFT
6.3 m^2/litre at 60 µm DFT

Dilution : Clean portable water

Ready for use, if necessary, dilution should not be more than 5% water

APPLICATION METHOD

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 : 0.015” – 0.021”
Pressure at Nozzle : >150 kg/cm^2

Typical Thickness : 0 – 60 µm dry film
105 – 158 µm wet film

Drying Time : Substrate Temperature : 30°C
Surface Dry : 1 hr
Through Dry : 4 hrs
Dry to Recoat (min) : 4 hrs
Dry to Recoat (max)* : Extended

The given data must be considered as guidelines only. The actual drying time/ times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

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

RECOMMENDED PAINTING SYSTEM

The following coating systems are recommended for Hi-Dro 60-02 Acrylic Gloss Top Coat:

Primer
- Hi-Pon 20-01 Epoxy Primer
- Hi-Pon 20-03 Epoxy Red Oxide Primer

HI-DRO 60-02 ACRYLIC GLOSS TOPCOAT

RECOMMENDED PAINTING SYSTEM

- 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-Dro 63-01 Universal Epoxy

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
- Talkalitt S100

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
5L	5L	5L
20L	20L	20L

STORAGE

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 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.

HI-PON 80-03 EPOXY PHENOLIC PRIMER

PRODUCT DESCRIPTION

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

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	: Red Oxide		
Gloss Level	: Matt		
Volume Solids, %	: 65 ± 2%		
Specific Gravity	: 1.40 kg/l (Mixed)		
Flash Point	: Base: 13.3°C	Hardener: 35°C	Mix: 13.3°C
VOC	: 357 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 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 blast cleaned to Sa 2½ (ISO 8501- 1:2007).

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, repair the damaged area using Hi-Pon 80-03.

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).

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

APPLICATION GUIDE

Mixing Ratio	: Base:Hardener = 6:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 4 hrs
Theoretical Coverage	: 6.5 m^2/litre at 100 µm DFT 3.2 m^2/litre at 200 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.018" – 0.026"	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
Typical Thickness	: 100 – 200 µm dry film 155 – 310 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 30 mins	20 mins
	Through Dry	: 4 hrs	3 hrs
	Cured	: 7 days	3 days
	Dry to Recoat (min)	: 8 hrs	5 hrs
	Dry to Recoat (max)	: 21 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.

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

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.

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, Grey
Gloss Level : Matt
Volume Solids, % : 65 ± 2%
Specific Gravity : 1.40 kg/l (Mixed)
Flash Point : Base: 13.3°C Hardener: 35°C Mix: 13.3°C
VOC : 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.

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 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).

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

HI-PON 80-04 EPOXY PHENOLIC TOPCOAT

APPLICATION GUIDE

Mixing Ratio : Base:Hardener = 6:1 (by volume)
Base and hardener should be mixed thoroughly before use.

Pot Life : 25°C
4 hrs

Theoretical Coverage : 6.5 m^2/litre at 100 µm DFT
: 3.2 m^2/litre at 200 µm DFT

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.018" – 0.026"
Pressure at Nozzle : 140 – 170 kg/cm^2

Typical Thickness : 100 – 200 µm dry film
155 – 310 µm wet film

Drying Time

Substrate Temperature	25°C	40°C
Surface Dry	30 mins	20 mins
Through Dry	4 hrs	3 hrs
Cured	10 days	7 days
Dry to Recoat (min)	8 hrs	5 hrs
Dry to Recoat (max)	21 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 PAINTING SYSTEM

The following coating system is recommended for Hi-Pon 80-04 Epoxy Phenolic Top Coat:

Primer
- Hi-Pon 80-03 Epoxy Phenolic Primer

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

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 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.

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.

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 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 80-07 should be overcoated as soon as hard dry to avoid intercoat adhesion problems.

HI-PON 80-07 NOVOLAC VINYL ESTER PRIMER

APPLICATION GUIDE

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 m^2/L at 100 µm DFT
Thinner	: Do not thin
Cleaner	: Hi-Pon Vinyl Ester Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.019” – 0.025”	
	Pressure at Nozzle	: >70 kg/cm^2	
Typical Thickness	: Steel	Concrete	
	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
	Dry to Recoat (min)*	: 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.

RECOMMENDED PAINTING SYSTEM

The following paint system is recommended for Hi-Pon 80-07 Novolac Vinyl Ester Primer:

Topcoat
- Hi-Pon 80-08 Novolac Vinyl Ester GF

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

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 : Part A: 5 months minimum (20°C)
Part B: 5 months minimum (20°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. 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.

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.

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 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.

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.

HI-PON 80-08 NOVOLAC VINYL ESTER GF

APPLICATION GUIDE

Mixing Ratio : Base:Hardener = 50.3:1 (by volume)
Base and hardener should be mixed thorough before use.

Pot Life : 25°C 35°C
55 mins 25 mins
(Pot life will vary substantially with temperature)

Theoretical Coverage : 1.70 m^2/litre at 500 µm DFT

Thinner : Do not thin

Cleaner : Hi-Pon Vinyl Ester Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush is recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.036" – 0.048"
Pressure at Nozzle : >220 kg/cm^2

Typical Thickness : 500 – 600 µm dry film
588 – 706 µm wet film

Drying Time

Substrate Temperature	: 25°C	35°C
Surface Dry	: 2 hrs	1.5 hrs
Through Dry	: 5 hrs	3 hrs
Cured*	: 5 days	3 days
Dry to Recoat (min)*	: 5 hrs	3 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.

RECOMMENDED PAINTING SYSTEM

The following paint system is recommended for Hi-Pon 80-08 Novolac Vinyl Ester GF:

Hi-Pon 80-08 is normally applied directly to steel, however, it can also be applied over the following primers.

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.

HI-PON 80-08 NOVOLAC VINYL ESTER GF

PACKAGING

Unit	Base		Hardener	
	Vol	Container Size	Vol	Container Size
20L	19.61L	20L	0.39L	5L

STORAGE

Shelf Life : Part A: 5 months minimum (20°C)
Part B: 5 months minimum (20°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. 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.

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.

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.

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 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 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:Hardener = 100:0.4:1.8 (by weight) Base and Accelerator should be mixed thoroughly before adding Hardener.	
Pot Life	: 25°C 55 mins	35°C 35 mins (Pot life will vary substantially with temperature)
Theoretical Coverage	: 0.55 kg/m² at 350 µm DFT	
Thinner	: Do not thin	
Cleaner	: Hi-Pon Vinyl Ester Thinner	

APPLICATION METHOD

Airless spray is recommended for application. Brush is recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.036" – 0.048"	
	Pressure at Nozzle	: >220 kg/cm²	
Typical Thickness	: 300 – 350 µm dry film 353 – 412 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	35°C
	Surface Dry	: 2 hrs	1.5 hrs
	Through Dry	: 5 hrs	3 hrs
	Cured*	: 3 days	3 days
	Dry to Recoat (min)*	: 5 hrs	3 hrs
	Dry to Recoat (max)*	: 3 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.

RECOMMENDED PAINTING SYSTEM

The following paint system is recommended for Hi-Pon 80-09 Novolac Vinyl Ester GF:

Hi-Pon 80-09 is normally applied directly to steel, however, it can also be applied over the following primers.

Primer
- Hi-Pon 80-10 Vinyl Ester Steel Primer
- Hi-Pon 80-11 Vinyl Ester Concrete Primer

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

HI-PON 80-09 NOVOLAC VINYL ESTER GF

PACKAGING

Base		Accelerator		Hardener	
Weight	**Container Size**	**Container Size**	**Weigh**	**Vol**	**Container Size**
20kg	20L	0.08kg	0.1L	0.36kg	0.5L

STORAGE

Shelf Life : Base : 4 months (25°C)
Accelerator : 6 months (25°C)
Hardener : 6 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. Recommended storage temperature range is 10°C - 15°C to prolong shelf life for Base only. Best practice would be to store them in separate locations.

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

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 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: 57°C Mix: 33°C
VOC : 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 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.

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

APPLICATION GUIDE

Mixing Ratio : Base:Accelerator:Hardener = 100:0.45:2 (by weight)

Base and Accelerator should be mixed thoroughly before adding Hardener.

Pot Life : 25°C 35°C
30 mins 20 mins
(Pot life will vary substantially with temperature)

Theoretical Coverage : 0.20 kg/m² at 100 µm DFT

Thinner : Do not thin

Cleaner : Hi-Pon Vinyl Ester Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.019" – 0.025"
Pressure at Nozzle : >70 kg/cm²

Typical Thickness : Steel
50 – 100 µm dry film
72 – 143 µm wet film

Drying Time

Substrate Temperature	: 25°C	35°C
Surface Dry	: 1 hr	1 hr
Through Dry	: 6 hrs	4 hrs
Cured*	: 7 days	6 days
Dry to Recoat (min)*	: 6 hrs	4 hrs
Dry to Recoat (max)*	: 7 days	6 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 paint system is recommended for Hi-Pon 80-10 Vinyl Ester Steel Primer:

Topcoat
- Hi-Pon 80-09 Novolac Vinyl Ester GF
- Hi-Pon 80-12 Vinyl Ester Lining

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

HI-PON 80-10 VINYL ESTER STEEL PRIMER

PACKAGING

Base		Accelerator		Hardener	
Weight	Container Size	Container Size	Weigh	Vol	Container Size
15kg	20L	67.5g	0.1L	0.30kg	0.5L

STORAGE

Shelf Life : Base : 6 months (25°C)
Accelerator : 6 months (25°C)
Hardener : 6 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. Recommended storage temperature range is 10°C - 15°C to prolong shelf life for Base only. Best practice would be to store them in separate locations.

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

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.

Concrete
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.

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 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	: Base:Accelerator:Hardener = 100:0.4:1.8 (by weight) Base and Accelerator should be mixed thoroughly before adding Hardener.
Pot Life	: 25°C 35°C 30 mins 20 mins (Pot life will vary substantially with temperature)
Theoretical Coverage	: 0.20 kg/m² at 100 µm DFT
Thinner	: Do not thin
Cleaner	: Hi-Pon Vinyl Ester Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.019” – 0.025”
Pressure at Nozzle : >70 kg/cm²

Typical Thickness : Concrete
50 – 100 µm dry film
72 – 143 µm wet film

Drying Time

	25°C	35°C
Substrate Temperature		
Surface Dry	1 hr	1 hr
Through Dry	6 hrs	4 hrs
Cured*	7 days	6 days
Dry to Recoat (min)*	6 hrs	4 hrs
Dry to Recoat (max)*	7 days	6 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 paint system is recommended for Hi-Pon 80-11 Vinyl Ester Concrete Primer:

Topcoat
- Hi-Pon 80-09 Novolac Vinyl Ester GF
- Hi-Pon 80-12 Vinyl Ester Lining

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

HI-PON 80-11 VINYL ESTER CONCRETE PRIMER

PACKAGING

Base		Accelerator		Hardener	
Weight	Container Size	Weight	Container Size	Weight	Container Size
20kg	20L	0.08kg	0.1L	0.36kg	0.5L

STORAGE

Shelf Life : Base : 6 months (25°C)
Accelerator : 6 months (25°C)
Hardener : 6 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. Recommended storage temperature range is 10°C - 15°C to prolong shelf life for Base only. Best practice would be to store them in separate locations.

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

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
- Final coat with air dry agent

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 75 – 100 microns (3 – 4 mils). If oxidation has occurred between the blasting and

SURFACE PREPARATION

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.

Concrete
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.

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 surface must be minimum 3°C above dew point of surrounding air. When surface temperatures exceed 35°C, Hi-Pon 80-12 should be overcoated as soon as hard-dry to avoid intercoat adhesion problems.

APPLICATION GUIDE

Mixing Ratio : Base:Accelerator:Hardener = 100:0.4:1.8 (by weight)
Base and Accelerator should be mixed thoroughly before adding Hardener.

Pot Life : 25°C 35°C
30 mins 20 mins
(Pot life will vary substantially with temperature)

Thinner : Do not thin

Cleaner : Hi-Pon Vinyl Ester Thinner

APPLICATION METHOD

Trowel is recommended for application of basecoat. Brush and roller are use for application of resin saturant and smoothing liquid. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Drying Time

Substrate Temperature	: 25°C	35°C
Surface Dry	: 1 hr 15 mins	1 hr
Through Dry	: 4 hrs	3 hrs
Cured*	: 7 days	7 days
Dry to Recoat (min)*	: 4 hrs	3 hrs
Dry to Recoat (max)*	: 7 days	7 days

APPLICATION DETAILS

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 paint system is recommended for Hi-Pon 80-12 Vinyl Ester Lining:

Primer
- Hi-Pon 80-10 Vinyl Ester Steel Primer
- Hi-Pon 80-11 Vinyl Ester Concrete Primer

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

PACKAGING

Base		Accelerator		Hardener	
Weight	Container Size	Weight	Container Size	Weight	Container Size
20kg	20L	0.8kg	1L	3.6kg	5L

STORAGE

Shelf Life : Base : 6 months (25°C)
Accelerator : 6 months (25°C)
Hardener : 6 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. Recommended storage temperature range is 10°C - 15°C to prolong shelf life for Base only. Best practice would be to store them in separate locations.

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.

HI-PON 80-12 VINYL ESTER LINING

SAFETY PRECAUTION

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

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, Grey		
Gloss Level	: Matt		
Volume Solids, %	: 64 ± 2%		
Specific Gravity	: 1.46 kg/l (Mixed)		
Flash Point	: Base: 13.3°C	Hardener: 35°C	Mix: 13.3°C
VOC	: 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.

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.

Damaged 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, 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).

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.

APPLICATION GUIDE

Mixing Ratio : Base:Hardener = 6:1 (by volume)
Base and hardener should be mixed thoroughly before use.

Pot Life : 25°C
4 hrs

Theoretical Coverage : 6.4 m^2/litre at 100 µm DFT
3.2 m^2/litre at 200 µm DFT

Thinner : Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray : Tip Size : 0.018" – 0.026"
Pressure at Nozzle : 140 – 170 kg/cm^2

Typical Thickness : 100 – 200 µm dry film
156 – 313 µm wet film

Drying Time

Substrate Temperature	25°C	40°C
Surface Dry	60 mins	30 mins
Through Dry	6 hrs	4 hrs
Cured*	10 days	7 days
Dry to Recoat (min)	6 hrs	4 hrs
Dry to Recoat (max)	21 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 PAINTING SYSTEM

Hi-Pon 200HT CUI is self-priming and normally applied as a 2-coat system which therefore not recommended for application over other primers/topcoats.

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
20L	17.1L	20L	2.9L	5L

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.

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)		
Typical Thickness	: 100 – 200 µm dry 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.

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.

Damaged 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, 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).

Other Surfaces
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

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	: Base:Hardener = 3.2:1 (by volume) Base and hardener should be mixed thoroughly before use.
Pot Life	: 25°C 1 hr
Theoretical Coverage	: 8.0 m^2/litre at 100 µm DFT 4.0 m^2/litre at 200 µm DFT
Thinner	: Hi-Pon Epoxy Thinner

APPLICATION METHOD

Airless spray is recommended for application. Brush and roller are recommended for stripe coating and small areas. Care must be taken to achieve the specified dry film thickness.

APPLICATION DETAILS

Airless Spray	: Tip Size	: 0.018” – 0.026”	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
Typical Thickness	: 100 – 200 µm dry film 125 – 250 µm wet film		
Drying Time	: Substrate Temperature	: 25°C	40°C
	Surface Dry	: 2 hrs	1 hr
	Through Dry	: 7 hrs	5 hrs
	Cured	: 10 days	7 days
	Dry to Recoat (min)	: 7 hrs	5 hrs
	Dry to Recoat (max)	: 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.

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

Hi-Pon 300HT CUI is self-priming and normally applied as a 2-coat system which therefore not recommended for application over other primers/topcoats.

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
20L	15.2L	20L	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

- 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.

PRODUCT DESCRIPTION

Hi-Pon 300HT Primer 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 primer 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

Colour	: Grey
Gloss Level	: Matt
Volume Solids, %	: 40 ± 2%
Specific Gravity	: 1.68 kg/l
Flash Point	: 7°C
VOC	: 554 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 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. For galvanised and light alloys, thorough degreasing is necessary.

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, the application of Hi-Pon 300HT Primer can be performed.

Hi-Pon 300HT 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).

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.

APPLICATION GUIDE

Mixing Ratio : Mixed thoroughly before use with a power agitator.

Theoretical Coverage : 20.0 m^2/litre at 20 µm DFT
: 13.3 m^2/litre at 30 µm DFT

Thinner : Hi-Pon HT 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 : Tip Size : 0.015" – 0.017"
Pressure at Nozzle : 140 – 170 kg/cm^2

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 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.

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 system is recommended:

Coating System 1
- Hi-Pon 300HT Primer, 1 coat x 25 µm dry film thickness
- Hi-Pon 300HT Top Coat, 2 coats 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

Shelf Life : 12 months (25°C)

HI-PON 300HT PRIMER

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 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 300HT TOPCOAT

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

Colour	: Aluminium, Black & Red (up to 300°C) White (up to 260°C)
Gloss Level	: Semi-gloss
Volume Solids, %	: 40 ± 2%
Specific Gravity	: 1.00 – 1.21 kg/l, depending on colours
Flash Point	: 7°C
VOC	: 520 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 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 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 300HT TOPCOAT

APPLICATION GUIDE

Mixing Ratio	: Mixed thoroughly before use with a power agitator.
Theoretical Coverage	: 20.0 m^2/litre at 20 µm DFT 13.3 m^2/litre at 30 µm DFT
Thinner	: Hi-Pon HT Thinner
Thinning	: For mist coat application, use 10 – 15% thinner for dilution

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	: 0.015" – 0.017"	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
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 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.

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 primers are recommended for Hi-Pon 300HT Topcoat:

Primer
- Zinky-12 Inorganic Zinc Rich Primer 77
- Zinky-13 Inorganic Zinc Rich Primer 85
- Hi-Pon 300HT Primer

Remarks: For maximum corrosion resistance, use a zinc silicate primer.

The following coating systems are recommended:

Coating System 1
- Hi-Pon 300HT Primer, 1 coat x 25 µm dry film thickness

HI-PON 300HT TOPCOAT

RECOMMENDED PAINTING SYSTEM

- Hi-Pon 300HT Top Coat, 2 coats x 25 µm 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

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 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 600HT TOPCOAT

PRODUCT DESCRIPTION

Hi-Pon 600HT Topcoat is a one-pack, silicone based coating which can 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 steel exposed to high temperature (below 540°C). Suitable for use in exhaust manifolds, furnaces, boiler, chimneys and other installations exposed to high temperatures.

GENERAL PROPERTIES

Colour	: Aluminium (up to 540°C) Black (up to 400°C)
Gloss Level	: Semi-gloss
Volume Solids, %	: 40 ± 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 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 600HT Top Coat.

Hi-Pon 600HT 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 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	: Mixed thoroughly before use with a power agitator.
Pot Life	: None
Theoretical Coverage	: 0.0 m^2/litre at 20 µm DFT 13.3 m^2/litre at 30 µm DFT
Thinner	: Hi-Pon HT Thinner
Thinning	: For mist coat application, use 10 – 15% thinner for dilution

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	: 0.015" – 0.017"	
	Pressure at Nozzle	: 140 – 170 kg/cm^2	
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.

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 primers are recommended for Hi-Pon 600HT Top Coat:

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

HI-PON 600HT TOPCOAT

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

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 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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