



ISO 12944-2018

Coating Selection Guide



Nippon Paint Singapore

An affiliate of Nippon Paint Japan and part of the Nipsea Group, Nippon Paint was established in Singapore in 1962. Today, it is one of the nation's leading paint manufacturers and enjoys an unsurpassed reputation for quality and innovation.

Nippon Paint Singapore combines in-depth local market knowledge with the global resources of the Nipsea Group. With 65 manufacturing facilities in 16 countries, the Group produces close to a billion litres of paints and coatings per annum.

In accordance with the Group's stringent quality control, Nippon Paint Singapore manufactures and markets a comprehensive range of paints that provide end-to-end solutions for virtually all painting needs, from residential interiors and exteriors to demanding industrial applications.

The company enforces a strict Quality, Environmental, Health and Safety Management System (QEHSMS) committed to the prevention of pollution, injury, ill health and exposure to hazards. Its policies protect all those who work directly or indirectly for the organisation.

Guided by core values of integrity, resourcefulness and the pursuit of excellence, Nippon Paint Singapore has blazed a trail for the painting industry with the launch of a series of first-in-Singapore functional painting products that not only beautify but protect the environment and the people in it.

An impressive portfolio of major projects, in infrastructure, oil and gas petrochemicals, attests the trust and confidence invested in the brand by leading project developers, architects and Government bodies.

REPRESENTED IN
16 COUNTRIES

21,000 NUMBER OF STAFF

65 MANUFACTURING FACILITIES



Cert No. 97/0009 SS ISO 14001: 2004
Cert No. 92-2-0044 SS ISO 9001: 2000
Cert No. OHS-2007-0197 OHSAS 18001: 1999
Environmentally Friendly No Lead Added No Mercury Added
TOWARDS ECO WELLNESS
Singapore Green Building Product SGBC LEADER

ISO 12944

A globally recognised standard for corrosion protection

The ISO 12944 standard aims to assist engineers and corrosion experts in adopting best practices in corrosion protection of structural steel in new constructions. It is a widely adopted and globally accepted industry standard, recognised by specifiers worldwide.

Whether in the open air, immersed in water or surrounded by soil, all unprotected steel is subject to corrosion which will eventually undermine its structural integrity. Corrosion protection will help optimise the performance and maximise the lifetime of the steel structure to which it is applied.

Selecting a coating system that complies with ISO 12944 provides you with the confidence that the corrosion protection you specify will fulfil your project and purpose.

To select the correct coating system for your project and purpose, first consider the environment and then the desired durability.



1 Select the Environment



Environment can be classified into the following atmospheric and immersed category.

The examples listed are informative and might occasionally be misleading. Only actual measurement of mass or thickness loss will give the correct classification.

TABLE 1: ATMOSPHERIC-CORROSIVITY CATEGORIES AND EXAMPLES OF TYPICAL ENVIRONMENTS

Corrosivity Category	EXTERIOR	INTERIOR
C1 VERY LOW	—	Heated buildings with clean atmospheres, e.g. offices, shops, schools, hotels
C2 LOW	Atmospheres with low level of pollution: mostly rural areas	Unheated buildings where condensation can occur, e.g. depots, sports halls
C3 MEDIUM	Urban and industrial atmospheres, moderate sulfur dioxide pollution; coastal areas with low salinity	Production rooms with high humidity and some air pollution, e.g. food-processing plants, laundries, breweries, dairies
C4 HIGH	Industrial areas and coastal areas with moderate salinity	Chemical plants, swimming pools, coastal ships and boatyards
C5 VERY HIGH	Industrial areas with high humidity and aggressive atmosphere and coastal areas with high salinity	Buildings or areas with almost permanent condensation and with high pollution
CX EXTREME	Offshore areas with high salinity and industrial areas with extreme humidity and aggressive atmosphere and subtropical and tropical atmospheres	Industrial areas with extreme humidity and aggressive atmosphere

Note: Corrosivity categories can also be estimated by considering the combined effect of the following environment factors: yearly time of wetness, yearly mean concentration of sulfur dioxide and yearly mean deposition of chloride (see ISO 9223). The loss values used for the corrosivity categories are identical to those given in ISO 9223.



For structures immersed in water or buried in soil, corrosion is normally local in nature and corrosivity categories are difficult to define. However, for the purpose of this document, various environments can be described. In table 2, four different environments are given together with their designations.

TABLE 2: CATEGORIES FOR WATER AND SOIL

Category	ENVIRONMENT	EXAMPLES OF ENVIRONMENT AND STRUCTURES
IM1	Fresh water	River installations, hydro-electronic power plants
IM2	Sea or brackish water	Immersed structures without cathodic protection (e.g. harbour areas with structures like sluice gates, locks or jetties)
IM3	Soil	Buried tanks, steel piles, steel pipes
IM4	Sea or brackish water	Immersed structures with cathodic protection (e.g. offshore structures)

Note: For corrosivity category IM1 and IM3, cathodic protection can be used with a paint system tested accordingly.

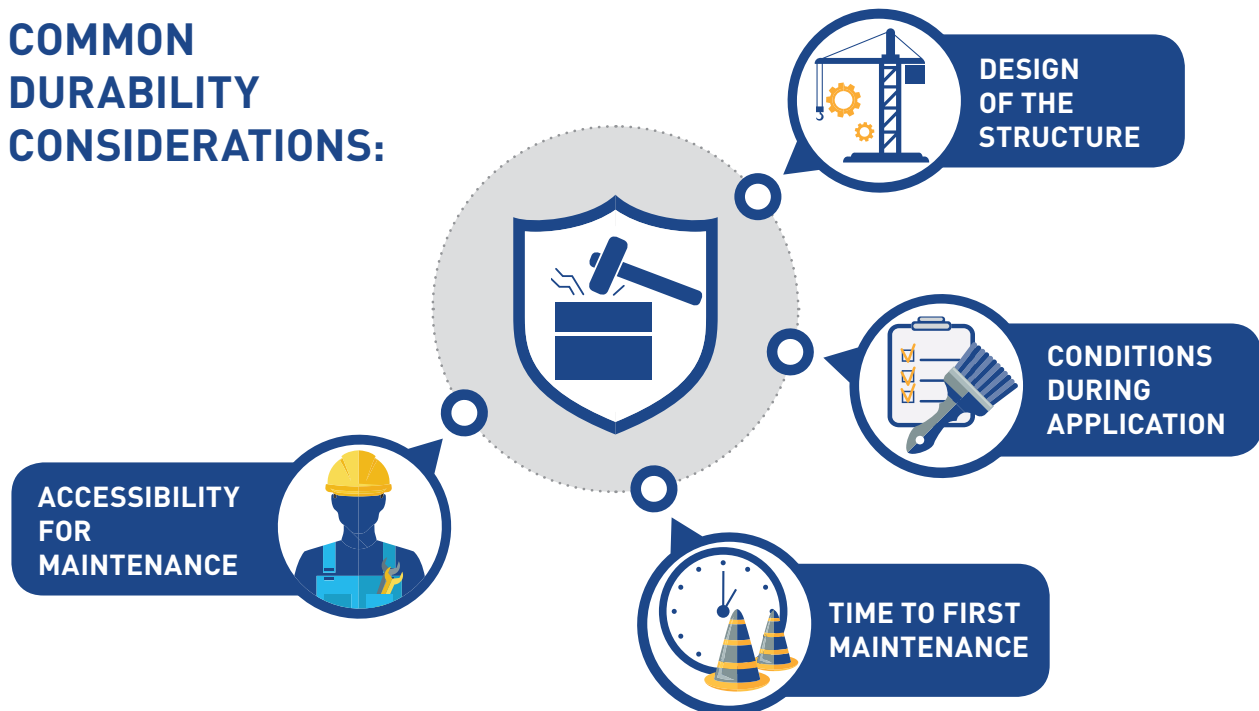
2 Select the Lifespan



Durability relates to the performance of the coating system before first major maintenance. Minor regular maintenance should be carried out in order to achieve the required life of the design system to first major maintenance (note that durability does not equate to a guarantee time).

DURABILITY	YEARS TO FIRST MAJOR MAINTENANCE
LOW (L)	Up to 7 years
MEDIUM (M)	7 to 15 years
HIGH (H)	15 to 25 years
VERY HIGH (VH)	More than 25 years

COMMON DURABILITY CONSIDERATIONS:



3 Select

the ISO 12944 compliant system

AK

Alkyd

AY

Acrylic

EP

Epoxy

ESI

Ethyl Silicate

PUR

Polyurethane

Zn (R)

Zinc Rich

TABLE C.2 PAINT SYSTEMS FOR CARBON STEEL FOR CORROSION CATEGORY C2

System No	PRIMER COAT			SUBSEQUENT COAT			PAINT SYSTEM			DURABILITY				
	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Total NDFT in µm	Total No of Coats	low (l)	med (m)	high (h)	very high (vh)
C2.01	HI-ALKYD 1402	AK	1	50	HI-ALKYD 1501	AK	1	30	80	2	☺			
C2.02	HI-ALKYD 1402	AK	1	60	HI-ALKYD 1501	AK	1	40	100	2	☺	☺		
C2.03	HI-VINYL 1201	AY	1	100	HI-ACRYL 1901	AY	1	60	160	2	☺	☺	☺	
C2.04	HI-VINYL 1201	AY	2	80	HI-ACRYL 1901	AY	1	40	200	3	☺	☺	☺	☺
C2.05	HI-PON 20-03 or HI-PON 20-10	EP	1	60	HI-PON 50-01 or HI-PON 50-03	PUR	1	60	120	2	☺	☺	☺	
C2.05	HI-PON 20-03 or HI-PON 20-10	EP	1	60	HI-PON 40-04	EP	1	60	120	2	☺	☺	☺	
C2.06	HI-PON 20-04 STE or HI-PON 20-07	EP	1	130	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	180	2	☺	☺	☺	☺
C2.06	HI-PON 20-04 STE or HI-PON 20-07	EP	1	130	HI-PON 40-04	EP	1	50	180	2	☺	☺	☺	☺
C2.07	ZINKY 13	ESI	1	60	-	-	-	-	60	1	☺	☺	☺	
C2.08	ZINKY 22 or ZINKY 23	Zn (R)	1	80	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	160	2	☺	☺	☺	☺

3 Select

the ISO 12944 compliant system

AK

Alkyd

AY

Acrylic

EP

Epoxy

ESI

Ethyl Silicate

PUR

Polyurethane

Zn (R)

Zinc Rich

TABLE C.3 PAINT SYSTEMS FOR CARBON STEEL FOR CORROSIIVITY CATEGORY C3

System No	SUBSEQUENT COAT										PAINT SYSTEM				DURABILITY			
	PRIMER COAT			MID COAT			TOP COAT				Total NDFT in µm	Total No of Coats	low (l)	med (m)	high (h)	very high (vh)		
	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product							No of Coats	NDFT in µm
C3.01	HI-ALKYD 1402	AK	1	60	-	-	-	HI-ALYKD 1501	AK	1	40	100	2	low (l)	med (m)	high (h)	very high (vh)	
C3.02	HI-VINYL 1201	AY	1	100	-	-	-	HI-ACRYL 1901	AY	1	60	160	2	low (l)	med (m)	high (h)	very high (vh)	
C3.03	HI-VINYL 1201	AY	2	75	-	-	-	HI-ACRYL 1901	AY	1	50	200	3	low (l)	med (m)	high (h)	very high (vh)	
C3.04	HI-VINYL 1201	AY	3	70	-	-	-	HI-ACRYL 1901	AY	1	50	260	4	low (l)	med (m)	high (h)	very high (vh)	
C3.05	HI-PON 20-03 or HI-PON 20-10	EP	1	80	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	130	2	low (l)	med (m)	high (h)	very high (vh)	
C3.05	HI-PON 20-03 or HI-PON 20-10	EP	1	80	-	-	-	HI-PON 40-04	EP	1	50	130	2	low (l)	med (m)	high (h)	very high (vh)	
C3.06	HI-PON 20-04 STE or HI-PON 20-07	EP	1	100	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	180	2	low (l)	med (m)	high (h)	very high (vh)	
C3.06	HI-PON 20-04 STE or HI-PON 20-07	EP	1	100	-	-	-	HI-PON 40-04	EP	1	80	180	2	low (l)	med (m)	high (h)	very high (vh)	
C3.07	HI-PON 20-03 or HI-PON 20-10	EP	1	80	HI-PON 30-02 or HI-PON 30-03	EP	1	110	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	240	3	low (l)	med (m)	high (h)	very high (vh)
C3.07	HI-PON 20-03 or HI-PON 20-10	EP	1	80	HI-PON 30-02 or HI-PON 30-03	EP	1	110	HI-PON 40-04	EP	1	50	240	3	low (l)	med (m)	high (h)	very high (vh)
C3.08	ZINKY 13	ESI	1	60	-	-	-	-	-	-	-	60	1	low (l)	med (m)	high (h)	very high (vh)	
C3.09	ZINKY 22 or ZINKY 23	Zn (R)	1	80	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	160	2	low (l)	med (m)	high (h)	very high (vh)	
C3.10	ZINKY 22 or ZINKY 23	Zn (R)	1	70	HI-PON 30-02 or HI-PON 30-03 or HI-PON 30-04	EP	1	80	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	200	3	low (l)	med (m)	high (h)	very high (vh)

3 Select

the ISO 12944 compliant system

AY Acrylic EP Epoxy ESI Ethyl Silicate PUR Polyurethane Zn (R) Zinc Rich

TABLE C.4 PAINT SYSTEMS FOR CARBON STEEL FOR CORROSIIVITY CATEGORY C4

System No	SUBSEQUENT COAT										PAINT SYSTEM				DURABILITY			
	PRIMER COAT			MID COAT			TOP COAT				Total NDFT in µm	Total No of Coats	low (l)	med (m)	high (h)	very high (vh)		
	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product							No of Coats	NDFT in µm
C4.01	HI-VINYL 1201	AY	1	100	-	-	-	-	HI-ACRYL 1901	AY	1	60	160	2	low (l)	med (m)	high (h)	very high (vh)
C4.02	HI-VINYL 1201	AY	2	75	-	-	-	-	HI-ACRYL 1901	AY	1	50	200	3	low (l)	med (m)	high (h)	very high (vh)
C4.03	HI-VINYL 1201	AY	3	70	-	-	-	-	HI-ACRYL 1901	AY	1	50	260	4	low (l)	med (m)	high (h)	very high (vh)
C4.04	HI-PON 20-10	EP	1	80	-	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	130	2	low (l)	med (m)	high (h)	very high (vh)
C4.04	HI-PON 20-10	EP	1	80	-	-	-	-	HI-PON 40-04	EP	1	50	130	2	low (l)	med (m)	high (h)	very high (vh)
C4.05	HI-PON 20-04 STE or HI-PON 20-07	EP	1	130	-	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	180	2	low (l)	med (m)	high (h)	very high (vh)
C4.05	HI-PON 20-04 STE or HI-PON 20-07	EP	1	130	-	-	-	-	HI-PON 40-04	EP	1	50	180	2	low (l)	med (m)	high (h)	very high (vh)
C4.06	HI-PON 20-04 STE or HI-PON 20-07	EP	1	80	HI-PON 30-02 or HI-PON 30-03	EP	1	110	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	240	3	low (l)	med (m)	high (h)	very high (vh)
C4.06	HI-PON 20-04 STE or HI-PON 20-07	EP	1	80	HI-PON 30-02 or HI-PON 30-03	EP	1	110	HI-PON 40-04	EP	1	50	240	3	low (l)	med (m)	high (h)	very high (vh)
C4.07	HI-PON 20-04 STE or HI-PON 20-07	EP	1	150	HI-PON 30-02 or HI-PON 30-03	EP	1	150	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	300	3	low (l)	med (m)	high (h)	very high (vh)
C4.07	HI-PON 20-04 STE or HI-PON 20-07	EP	1	125	HI-PON 20-04 STE or HI-PON 30-02 or HI-PON 30-03	EP	1	125	HI-PON 40-04	EP	1	50	300	3	low (l)	med (m)	high (h)	very high (vh)
C4.08	ZINKY 13	ESI	1	60	-	-	-	-	-	-	-	-	60	1	low (l)	med (m)	high (h)	very high (vh)
C4.09	ZINKY 22 or ZINKY 23	Zn (R)	1	80	-	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	160	2	low (l)	med (m)	high (h)	very high (vh)
C4.10	ZINKY 22 or ZINKY 23	Zn (R)	1	60	HI-PON 30-02 or HI-PON 30-03 or HI-PON 30-04	EP	1	90	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	200	3	low (l)	med (m)	high (h)	very high (vh)
C4.11	ZINKY 22 or ZINKY 23	Zn (R)	1	60	HI-PON 30-02 or HI-PON 30-03	EP	1	150	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	260	3	low (l)	med (m)	high (h)	very high (vh)

3 Select

the ISO 12944 compliant system

EP Epoxy PUR Polyurethane Zn (R) Zinc Rich

TABLE C.5 PAINT SYSTEMS FOR CARBON STEEL FOR CORROSIIVITY CATEGORY C5

System No	SUBSEQUENT COAT										PAINT SYSTEM			DURABILITY		
	PRIMER COAT			MID COAT			TOP COAT				Total NDFT in µm	Total No of Coats	low (l)	med (m)	high (h)	very high (vh)
	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product						
C5.01	HI-PON 20-04 STE AL or HI-PON 20-07	EP	1	130	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	180	2	🟡		
C5.02	ZINKY 22 or ZINKY 23	Zn (R)	1	80	HI-PON 30-02 or HI-PON 30-03	EP	1	110	HI-PON 50-01 or HI-PON 50-03	PUR	1	240	3	🟡		
C5.02	HI-PON 20-04 STE AL or HI-PON 20-07	EP	1	180	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	60	240	2	🟡		
C5.03	ZINKY 22 or ZINKY 23	Zn (R)	1	80	HI-PON 30-02 or HI-PON 30-03	EP	1	170	HI-PON 50-01 or HI-PON 50-03	PUR	1	300	3	🟡	🟡	
C5.03	HI-PON 20-04 STE AL or HI-PON 20-07	EP	1	125	HI-PON 30-02 or HI-PON 30-03	EP	1	125	HI-PON 50-01 or HI-PON 50-03	PUR	1	300	3	🟡	🟡	
C5.04	ZINKY 22 or ZINKY 23	Zn (R)	1	80	HI-PON 30-02 or HI-PON 30-03 or HI-PON 30-04	EP	2	100	HI-PON 50-01 or HI-PON 50-03	PUR	1	360	4	🟡	🟡	🟡
C5.04	HI-PON 20-04 STE AL or HI-PON 20-07	EP	1	100	HI-PON 30-02 or HI-PON 30-03 or HI-PON 30-04	EP	2	100	HI-PON 50-01 or HI-PON 50-03	PUR	1	360	4	🟡	🟡	🟡
C5.05	ZINKY 22 or ZINKY 23	Zn (R)	1	80	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	160	2	🟡		
C5.06	ZINKY 22 or ZINKY 23	Zn (R)	1	80	HI-PON 30-04	EP	1	70	HI-PON 50-01 or HI-PON 50-03	PUR	1	200	3	🟡	🟡	
C5.07	ZINKY 22 or ZINKY 23	Zn (R)	1	80	HI-PON 30-02 or HI-PON 30-03	EP	1	130	HI-PON 50-01 or HI-PON 50-03	PUR	1	260	3	🟡	🟡	
C5.08	ZINKY 22 or ZINKY 23	Zn (R)	1	80	HI-PON 30-02 or HI-PON 30-03	EP	1	180	HI-PON 50-01 or HI-PON 50-03	PUR	1	320	3	🟡	🟡	🟡

TABLE C.6 PAINT SYSTEMS FOR CARBON STEEL FOR IMMERSION CATEGORIES IM1 IM2 IM3

System No	SUBSEQUENT COAT										PAINT SYSTEM			DURABILITY		
	PRIMER COAT			MID COAT			TOP COAT				Total NDFT in µm	Total No of Coats	low (l)	med (m)	high (h)	very high (vh)
	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product						
I.03	HI-PON 20-04 STE GF	EP	1	190	-	-	-	HI-PON 20-04 STE GF	EP	1	190	380	2	🟡	🟡	🟡
I.04	HI-PON 90-01	EP	1	270	-	-	-	HI-PON 90-01	EP	1	270	540	2	🟡	🟡	🟡
I.05	HI-PON 20-04 STE GF	EP	1	200	-	-	-	HI-PON 20-04 STE GF	EP	1	200	400	2	🟡	🟡	🟡
I.06	HI-PON 90-01	EP	1	300	-	-	-	HI-PON 90-01	EP	1	300	600	2	🟡	🟡	🟡

3 Select

the ISO 12944 compliant system

EP

Epoxy

PUR

Polyurethane

TABLE D.1 PAINT SYSTEMS ON HOT DIP GALVANISED STEEL FOR CORROSION CATEGORIES C2 TO C5

System No	Corrosion Category	PRIMER COAT					MID COAT					SUBSEQUENT COAT					TOP COAT					PAINT SYSTEM					DURABILITY			
		Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Total No of Coats	Total NDFT in µm	low (l)	med (m)	high (h)	very high (vh)			
G2.01	C2	HI-PON 20-03	EP	1	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	80	1	1	1	1	1	1		
G2.03		HI-PON 20-03	EP	1	80	-	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	-	-	-	-	-	-	-	-	2	130	2	2	2	2	2	2	
G3.01	C3	HI-PON 20-03	EP	1	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	80	1	1	1	1	1	1		
G3.02		HI-PON 20-03	EP	1	80	-	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	-	-	-	-	-	-	-	-	2	130	2	2	2	2	2	2	
G3.04	C4	HI-PON 20-03	EP	1	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	80	1	1	1	1	1	1		
G4.01		HI-PON 20-03	EP	1	80	-	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	-	-	-	-	-	-	-	-	2	160	2	2	2	2	2	2	
G4.02	C4	HI-PON 20-03	EP	1	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	80	1	1	1	1	1	1		
G4.04		HI-PON 20-03	EP	1	80	-	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	-	-	-	-	-	-	-	-	2	130	2	2	2	2	2	2	
G4.06	C4	HI-PON 20-03	EP	1	80	HI-PON 30-04	EP	1	70	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	HI-PON 50-01 or HI-PON 50-03	PUR	1	200	3	200	3	3	3	3	3		
G5.01		HI-PON 20-03	EP	1	80	-	-	-	-	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	HI-PON 50-01 or HI-PON 50-03	PUR	1	130	2	130	2	2	2	2	2		
G5.02	C5	HI-PON 20-03	EP	1	80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	80	1	1	1	1	1	1		
G5.04		HI-PON 20-03	EP	1	80	HI-PON 30-04	EP	1	70	HI-PON 50-01 or HI-PON 50-03	PUR	1	50	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	HI-PON 50-01 or HI-PON 50-03	PUR	1	200	3	200	3	3	3	3	3		
G5.05	C5	HI-PON 20-03	EP	1	80	HI-PON 30-02 or HI-PON 30-03 or HI-PON 30-04	EP	1	100	HI-PON 50-01 or HI-PON 50-03	PUR	1	60	HI-PON 50-01 or HI-PON 50-03	PUR	1	240	HI-PON 50-01 or HI-PON 50-03	PUR	1	240	3	240	3	3	3	3	3		
G5.05		HI-PON 20-03	EP	1	80	HI-PON 30-02 or HI-PON 30-03 or HI-PON 30-04	EP	1	100	HI-PON 50-01 or HI-PON 50-03	PUR	1	60	HI-PON 50-01 or HI-PON 50-03	PUR	1	240	HI-PON 50-01 or HI-PON 50-03	PUR	1	240	3	240	3	3	3	3	3		

3 Select

the ISO 12944 compliant system

EP

Epoxy

PUR

Polyurethane

TABLE E.1 PAINT SYSTEMS ON THERMAL SPRAYED METALLIC COATING FOR CORROSION CATEGORIES C4 AND C5

System No	Corrosivity Category	SUBSEQUENT COAT																	
		PRIMER COAT				MID COAT				TOP COAT				PAINT SYSTEM		DURABILITY			
		Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Product	Type of Product	No of Coats	NDFT in µm	Total No of Coats	Total NDFT in µm	low (l)	med (m)	high (h)	very high (vh)
TSM 4.01	C4	HI-PON 20-03	EP	1	N/A	HI-PON 20-04 STE	1	EP	80	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	2	160				
TSM 4.02		HI-PON 20-03	EP	1	N/A	HI-PON 20-04 STE	1	EP	120	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	2	200				
TSM 5.01	C5	HI-PON 20-03	EP	1	N/A	HI-PON 20-04 STE	1	EP	120	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	2	200				
TSM 5.02		HI-PON 20-03	EP	1	N/A	HI-PON 20-04 STE	1	EP	120	HI-PON 50-01 or HI-PON 50-03	PUR	1	80	2	240				

Notes:

- For C5X and IM4 Environment Paint System, please consult a Nippon Paint Representative

The information presented here 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 ISO 12944 Compliant System without prior notice. It is the user's responsibility to check with Nippon Paint for the latest version. This ISO 12944 Compliant System has been translated into various languages. In the event of any inconsistency, the English version shall prevail.



Nippon Paint (Singapore) Co. Pte Ltd
1 First Lok Yang Road, Jurong Singapore 629728
Tel: (65) 6265 5355 WhatsApp: (65) 9369 7222

Email: customer@nipponpaint.com.sg
pc.nipponpaint.com

BANGLADESH

Head Office

Nippon Paint (Bangladesh) Pvt. Ltd.
60/E/2, Purana Paltan, (Dewan Monjil)
Dhaka – 1000.
Tel/Fax : (88) 02 9559889
Email : customercare@nipponpaint.com.bd
URL : www.nipponpaint.com.bd

CHINA

Head Office

Nippon Paint (China) Co. Ltd
Yong Da International Building,
12th FL., 2277 Long Yang Road, Pudong New
District, Shanghai 201204, P.R. China
Tel : (86) 21 5010 1687 / 3871 9988
Fax : (86) 21 5010 1102
URL : www.nipponpaint.com.cn

Shanghai Office

Nippon Paint (China) Co. Ltd
11th FL, Block No. 1, 500 Shengxia Road,
Zhangjiang, Pudong New District, Shanghai
201210 P.R. China
Tel : (86) 21 6882 9377
Fax : (86) 21 6882 9211

Shanghai Office

Nippon Paint (China) Co. Ltd
No.287 Chuang Ye Road Jinqiao Development
Zone, Pudong New District, Shanghai 201201
P.R. China
Tel : (86) 21 5838 4799
Fax : (86) 21 5838 4882

HONG KONG, CHINA

Head Office

Nippon Paint (H.K.) Co., Ltd.
Suites 3203-4, 32/F., Tower 2, Nina Tower,
8 Yeung Uk Road, Tsuen Wan, New Territories,
Hong Kong
Tel : (852) 2699 9333
Fax : (852) 2602 8844
Email : np@nipponpaint.com.hk
URL : www.nipponpaint.com.hk

INDIA

Industrial Use

Pune IU
Nippon Paint (India) Private Limited
S-196, MIDC., Bhosari, Pune-411 026
Tel : (91) 20 3068 5600
Fax : (91) 20 3068 5603

Head Office

Nippon Paint (India) Pvt Ltd.
New No. 3
(New Door No.2, Old Door No. 1)
Club House Road
Chennai - 600 002
Tamil Nadu, India
Tel : (91) 44 4298 2222
Fax : (91) 44 4298 2200

INDONESIA

Jakarta HQ Office

PT Nipsea Paint and Chemicals
Jl Ancol Barat I/A5/C No. 12 Jakarta 14430,
Indonesia
Tel : (62) 21 690 0546
Fax : (62) 21 692 7778 / 690 0540
Email : enquiry@nipponpaint-indonesia.com
URL : www.nipponpaint-indonesia.com

Surabaya Office

PT Nipsea Paint and Chemicals
Jl Raya Veteran No. 258 Gresik 61123 Jawa
Timur, Indonesia
Tel : (62) 31 398 1536
Fax : (62) 31 398 2285

Medan Office

PT Nipsea Paint and Chemicals
Jl KL Yos Sudarso Km. 8.3 Tanjung Mulia
Medan, Indonesia
Tel : (62) 61 685 1117
Fax : (62) 61 685 1593

MALAYSIA

Head Office

Nippon Paint (M) Sdn Bhd
Lot I-17 Taman Perindustrian Subang Utama,
Jalan SU 4, 40300 Shah Alam Selangor Darul
Ehsan, Malaysia
Tel : (60) 3 5125 0888
Fax : (60) 3 5191 4849
Email : customercare@nipponpaint.com.my
URL : www.nipponpaint.com.my

Johor Bahru Office

Nippon Paint (M) Sdn Bhd
172 Jalan Datin Halimah,
Larkin Industrial
Estate 80350 Johor Bahru, Malaysia
Tel : (60) 7 237 7095
Fax : (60) 7 237 6144
Email : np@msia.nipponpaint.com

MYANMAR

Yangon Office

Building 14, Ground Floor, MICT Park,
Hlaing Campus, Hlaing Township, Yangon,
Myanmar
Tel : (95) 9 2641 53024 / 9 2641 53025
Email : customer@nipponpaint.com.mm
URL : www.nipponpaint.com.mm

Mandalay Office

HZA - 7/10, 60 Street,
Chan Mya Thar Si Township,
Mandalay, Myanmar
Tel : (95) 9 9680 34238

PAKISTAN

Head Office

Nippon Paint (Pakistan) (Private) Limited
39-Km, Ferozepur Road, Lilyani (Mustafabad),
Tehsil & District Kasur, Post Code 55110 Punjab,
Pakistan
Tel : (92) 49 2450812 (3 lines)
Fax : (92) 49 2450815
Email : info@nipponpaint.com.pk
URL : www.nipponpaint.com.pk
UAN : 111-NIPPON (647766)

Lahore City Office

Nippon Paint (Pakistan) (Private) Limited
100-G, Phase 1, DHA,
Lahore Cantonment, Pakistan
Tel : (92) 42-3733 1481 84
Fax : (92) 42-3733 1485
UAN (Lhr, Khi, Isb): 111-NIPPON (647766)

PHILIPPINES

Head Office

Nippon Paint (Coatings) Philippines, Inc.
No. 4 Hologram Street, Light Industry & Science
Park 1, Cabuyao, Laguna, Philippines
Tel : (632) 845 1176 / 77
Fax : (632) 845 1152 / (6349) 543 0537
Email : npssales@nipponpaint.com.ph

SRI LANKA

Head Office

Nippon Paint (Lanka) Private Limited
Nippolac Towers: No. 69A,
Buthgamuwa Road, Rajagiriya,
Sri Lanka
Tel : (94) 114 35 6900
Fax : (94) 11 435 6909
Email : colombo@nipponpaint.com.lk
URL : www.nipponpaint.com.lk

Matara Office

No. 67, Kumaradasa Road, Matara
Tel : 041 4933530
Fax : 041 2222041
Email : matara@nipponpaint.com.lk

TAIWAN, CHINA

Head Office

Asia Industries Ltd. IU (Industrial Coatings)
No. 24, Dongyuan Rd., Zhongli Dist., Taoyuan
City 320, Taiwan (R.O.C)
Tel : (886) 3 452 9529
Fax : (886) 3 452 9555
Email : asia_aew@nipponpaint.com.tw
URL : www.nipponpaint.com.tw

Kaohsiung Office

Asia Industries Ltd
No. 2-1 Ln. 161, Beichang 3rd St., Fengshan Dist.,
Kaohsiung City 830, Taiwan (R.O.C.)
Tel : (886) 7 733 8251
Fax : (886) 7 733 2404
Email : asia_aew@nipponpaint.com.tw

THAILAND

Bangpakong Office

Nippon Paint (Thailand) Co. Ltd
700/29, 31 Moo 6, T.
Nongmaidaeng, 700/33 Moo 5, T.
Klongtamru A. Muang, Chonburi 20000,
Thailand
Tel : (66) 3821 4150
Fax : (66) 3821 3706

VIETNAM

Ho Chi Minh (Sales Office)

Nippon Paint (Vietnam) Co. Ltd
No 02, Nguyen Binh Khiem Road, Ben Nghe Ward,
District 01, HCMC
Tel : (84) 28 39115591 - 39115619/01/16/17
Fax : (84) 28 3911 5592/3910 6989

Ha Noi (Sales Office)

Nippon Paint (Vietnam) Co. Ltd
FL 6 & 7, No 9, Alley 106, Hoang Quoc Viet Road,
Cau Giay District, Ha Noi
Tel : (84) 24 3934 2000 - 3934 2001
Fax : (84) 24 3934 2024