

# **Aquatec Fluorocarbon F100**

#### **General Description**

Nippon Paint Aquatec Fluorocarbon F100 is an water-based exterior paint ultra-premium with fluorocarbon resin and is certified with "Hong Kong Green Label Scheme". Its outstanding features include low VOC, excellent weathering resistance, dirt resistance, alkali resistance, water resistance, humidity resistance, heat resistance, salt water resistance, fungus and algae resistance, impermeability of water and self-cleaning property, providing the most outstanding performances and the most superior protections for exteriors.

#### Features

- Low VOC
- Dense film
- Excellent hiding power
- Excellent durability
- Excellent weathering resistance
- · Excellent humidity resistance
- Excellent alkali resistance
- Excellent water resistance
- Excellent heat resistance
- Excellent dirt resistance • Self-cleaning property
- Excellent impermeability
- of water • Excellent salt water resistance
- Fungus / algae resistance

# **Recommended For**

- Exterior masonry surfaces
  - Hotels
  - Schools
  - Residential buildings - Commercial buildings
  - Industrial buildings

# **Certification(s)**



HKGLS Code No. GL-008-010 Certification No. HK-02162

# **General Information**

Colour:	White, black and Nippon Paint 1881 colour creations	Drying time: (at 25°C)	Surface dry: $\geq 2$ hrs
Туре:	Modified Fluorocarbon Resin	Overcoat Time: (at 25℃)	≥4 hrs
Finishes:	Matt / Semi-gloss	Full Curing (at 25 ℃)	7 days
Application Method:	Brush / Roller/ Air spray	Specific Gravity: (at 25℃)	1.00~1.40
Theoretical Coverage:	0.14 kg/m <sup>2</sup> /coat	Solid Content: (by volume)	44±4%
Dilution:	Brush / Roller - 0-5% clean water Air spray - 10-20% clean water	Packing:	20 kg
Dry Film Thickness:	30µm	Shelf Life:	24 months in sealed original packaging stored at room temperature and shaded place.

# Nippon Paint Aquatec Fluorocarbon F100

	<b>Technical Data</b>	
Test	Test Method	Result
VOC Content (g/L)	USEPA Method 24	<50
Halogenated Solvents Content (% by wt.)	USEPA Method 311	ND
Heavy Metal - Lead (ppm)	USEPA Method 3051A and 7196A	ND
Heavy Metal - Cadmium (ppm)	USEPA Method 3051A and 7196A	ND
Heavy Metal - Mercury (ppm)	USEPA Method 3051A and 7196A	ND
Heavy Metal - Chromium VI (ppm)	USEPA Method 3051A and 7196A	ND
Formaldehyde (% by wt.)	ASTM D5910-05 (2012)	ND
Aromatic Compound (% by wt.)	USEPA Method 311	0.001
Metal Material for ROHS - Heavy Metal - Lead (ppm)	USEPA 3051A, 7196A, 3540C and 8081A	ND
Metal Material for ROHS - Heavy Metal - Cadmium (ppm)	USEPA 3051A, 7196A, 3540C and 8081A	ND
Metal Material for ROHS - Heavy Metal - Mercury (ppm)	USEPA 3051A, 7196A, 3540C and 8081A	ND
Metal Material for ROHS - Heavy Metal - Chromium VI (ppm)	USEPA 3051A, 7196A, 3540C and 8081A	ND
Metal Material for ROHS – PBBs Content (ppm)	USEPA 3051A, 7196A, 3540C and 8081A	ND
Metal Material for ROHS – PBDEs Content (ppm)	USEPA 3051A, 7196A, 3540C and 8081A	ND
Low Temperature Stability @ -5°C	JIS K 5660 : 2008 7.7	There is no change in quality
Workability	JIS K5660 : 2008 7.5	There is no obstacle to apply materials twice by brush

# Nippon Paint Aquatec Fluorocarbon F100

	<b>Technical Data</b>	
Test	Test Method	Result
Appearance	JIS K5660 : 2008 7.6	There is no change in the appearance of paint film
Hiding ability	JIS K5660 : 2008 7.9	1
Water Resistance	JIS K5660 :2008 7.11	After immersion in water for 96 hours, the gloss retention ratio is 99% and there is no change in the paint film
Alkali Resistance	JIS K 5660 : 2008 7.12	After immersion in alkali for 7 days, the gloss retention ratio is 97% and there is no change in the paint film
Washability	JIS K5660 : 2008 7.13	Possible to resist washing for 1000 times
Salt Water Resistance (3000 Hours)	JIS K 5400 : 1990 8.23	No damage observed on the paint film
Heat Resistance	JIS K5660 : 2008 7.14	The gloss retention is 99%
Dirt Resistance	Ref. JIS K5660 : 2008 7.16	5 (Grey Scale)
Accelerated Weathering Resistance (2000 Hours) - % of Gloss Retention	ASTM G154-16	98%
Accelerated Weathering Resistance (2000 Hours) - Colour Change (Grey Scale)	ASTM G154-16	4
Accelerated Weathering Resistance (2000 Hours) - Colour Change	ASTM G154-16	Negligible change in colour when compared to control sample
Condition in Container	JIS K5660 : 2008 7.4	When being stirred, it makes uniform condition, without any hard lumps
Application Properties	JIS K5660 : 2008 7.5	When making twice coating, no impediment for brushing work
Humidity and Cool-Heat Cycling Resistance	JIS K5660 : 2008 7.14	The gloss retention is 99% and endurable for humidity and cool-heat cycling test
Water Permeability (ml)	JIS A6909 : 1995 6.13 (Test method B)	0

### **Recommended Painting System**

Sealer/Primer: One coat of Ultra Sealer III Mid-coat: One coat of Aquatec Fluorocarbon F100 Mid-coat Top Coat: One coat of Aquatec Fluorocarbon F100

#### **Surface Preparation**

All surface must be clean, dry and free from oil, grease, dirt, contaminants and loose materials.

Dirt/Powder:	High-pressure wash.
Paint:	Remove unstable or old film by high-pressure wash, or scraper whichever is appropriate.
Plaster:	Remove by chisel or power grinder. Replaster to unstable surface with an approved mortar mixture.
Moisture:	High moisture causes paint defect. The moisture content of substrate should be less than 6% or 19 determined by Protimeter. All water seepage must be checked and rectified.
pH Value:	pH value should be less than 10.
Fungus:	Remove by high-pressure wash & treat with Nippon Paint Anti-Fungus Solution

- Oil/Grease: Clean off with mild detergent and a little solvent. Wash thoroughly to remove all trace.
- ♦ Ensure fresh air ingress while applying and before dry done

## Limitations

Avoid painting when the temperature is below  $5^{\circ}$ C or the humidity is over 85%. Do not paint when raining and rain is expected during painting or drying process.

## **Clean Up**

Wash painting tools with water immediately after use

## **Safety Information**

Keep out of reach of children. If medical advice is needed, get the product container or label at hand for easy reference.

Be aware of sanding dust / spray mist. Protective gloves, eye or face protection are highly recommended. Keep away from sparks, heat, open flames and any other ignition sources.

Eating, drinking and smoking should be prohibited in areas where the material is handled, stored and processed.

In case of eye contact, rinse immediately with plenty of water. For splashed skin, clean thoroughly with soap and water. Seek medical attention if indication persists.

If you experience difficulties on breathing, leave applied area and obtain fresh air. If difficulties continue, immediately get medical attention.

Product must always be stored in a ventilated, cool and dry place.

Tightly close product container after each use.

## **Flash Point and Ignition Point**

Flash Point: N/A Ignition Point: N/A

Note: The information given applies to the product and its performance under specific test condition. Due to the varied circumstances beyond our control under which the product may be applied, for specific applications, please contact Nippon Paint Project Sales Department. We reserve the right to modify our product specification without prior notice.

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# **Aquatec Fluorocarbon F100 Mid-Coat**

### **General Description**

Nippon Paint Aquatec Fluorocarbon F100 Mid Coat is an intermediate layer of the Aquatec Fluorocarbon F100 Coating System. It gives a strong adhesion with finish coat of Aquatec Fluorocarbon F100 and provides outstanding performances when using with finish coat.

#### Features

- Low VOC
- Excellent adhesion
- Excellent hiding power
- Provides excellent and all-round performances when using with finish coat

General Information			
Colour:	White, black and Nippon Paint 1881 colour creations	Drying time: (at 25℃)	Touch dry: 10 mins Dust free : 30 mins
Туре:	Water-based fluorocarbon	Overcoat Time: (at 25℃)	$\geq$ 2 hrs
Finishes:	Matt / Semi-gloss	Full Curing (at 25 °C)	7 days
Application Method:	Roller / Brush / Spray	Specific Gravity: (at 20°C)	1.25 ± 2%
Theoretical Coverage:	0.15~0.16 kg/m <sup>2</sup> /coat Brush – 0.15 kg/m <sup>2</sup> Roller – 0.15 kg/m <sup>2</sup> Spray – 0.16 kg/m <sup>2</sup>	Solid Content: (by volume)	41 ± 8%
Dilution:	5-10 % clean water	Packing:	20 kg
Dry Film Thickness:	30µm	Shelf Life:	36 months in sealed original packaging stored at room temperature and shaded place.

#### **Recommended For**

- Exterior masonry surfaces
  - Hotels
  - Schools
  - Residential buildingsCommercial buildings
  - Industrial buildings

#### **Technical Data**

Test	Test Method	Result
VOC Content (g/L)	USEPA Method 24	<50

# **Recommended Painting System**

Sealer/Primer: One coat of Ultra Sealer III Mid-coat: One coat of Aquatec Fluorocarbon F100 Mid-coat Top Coat: One coat of Aquatec Fluorocarbon F100

## **Surface Preparation**

All surface must be clean, dry and free from oil, grease, dirt, contaminants and loose materials.

Dirt/Powder:	High-pressure wash.	

- Paint: Remove unstable or old film by high-pressure wash, or scraper whichever is appropriate.
- Plaster: Remove by chisel or power grinder. Replaster to unstable surface with an approved mortar mixture.
- Moisture: High moisture causes paint defect. The moisture content of substrate should be less than 6% or 19 determined by Protimeter. All water seepage must be checked and rectified.

pH Value: pH value should be less than 10.

- Fungus: Remove by high-pressure wash & treat with Nippon Paint Anti-Fungus Solution
- Oil/Grease: Clean off with mild detergent and a little solvent. Wash thoroughly to remove all trace.
- ♦ Ensure fresh air ingress while applying and before dry done
- ♦ High humidity and cool temperature will result in longer drying time

#### Limitations

Avoid painting when the temperature is below  $5^{\circ}$ C or the humidity is over 85%. Do not paint when raining and rain is expected during painting or drying process.

## **Clean Up**

Wash painting tools with water immediately after use

### **Safety Information**

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Be aware of sanding dust / spray mist. Protective gloves, eye or face protection are highly recommended. Keep away from sparks, heat, open flames and any other ignition sources.

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If you experience difficulties on breathing, leave applied area and obtain fresh air. If difficulties continue, immediately get medical attention.

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# **Flash Point and Ignition Point**

Flash Point: N/A Ignition Point: N/A

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# **Ultra Sealer III**

**Recommended For** 

· Interiors and exteriors

- Quality skim coat

- Cement plaster

- Concrete

## **General Description**

Nippon Paint Ultra Sealer III is a high performance water-based alkali-resistant acrylic sealer which is formulated to prevent deterioration of top coat by strong concentration of cement chemicals and provides a better surface condition for top coat to adhere on. With elastic property, water resistance, fungus and algae resistance, it gives a good performance and protection for interior and exterior surfaces.

#### Features

- Elastic
- Excellent adhesion
- Quick drying
- Excellent alkali resistance
- Water resistance
- Fungus and algae resistance
- Efflorescence resistance

General Information			
Colour:	Clear / White	Drying time: (at 30℃)	Touch dry: 10 mins
Туре:	Modified acrylic copolymer	Overcoat Time: (at 25℃)	2 hrs
Finishes:	Matt	Full Curing (at 25 °C)	7 days
Application Method:	Brush / Roller /Airless spray	Specific Gravity: (at 25 °C)	1.04 ~1.11
Theoretical Coverage:	12m²/L/coat	Solid Content: (by volume)	36.5
Dilution:	Brush/Roller - max 30% water (Internal) - max 20% water (External) Spray - max 20% water (Internal) - max 10% water (External)	Packing:	18L
Dry Film Thickness:	30µm	Shelf Life:	36 months in sealed original packaging stored at room temperature and shaded place.

# <u>Ultra Sealer III</u>

	Technical Data	
Test	Test Method	Result
VOC Content (g/L)	USEPA Method 24	<100
Formaldehyde (mg/kg)	GB 18582-2008	21
Heavy Metal - Lead (mg/kg)	GB 18582-2008	ND
Heavy Metal - Cadmium (mg/kg)	GB 18582-2008	ND
Heavy Metal - Chromium (mg/kg)	GB 18582-2008	ND
Heavy Metal - Mercury (mg/kg)	GB 18582-2008	ND
Condition in Container	JIS K5400 : 1990 4.1	There was no lumps, no separation and no coagulation of the ingredients
Hardness (Pencil Scratch Value)	JIS K5400 : 1990 8.4.2	Н
Film Appearance	JIS K5400 : 1990 7.1	Appearance of film is normal
Water Resistance	JIS K5400 : 1990 8.19	Unchanged when immersed 96 hours in tap water
Alkaliproof	JIS K5400 : 1990 8.21	Unchanged when immersed 48 hours in saturated solution of calcium hydroxide
Water Permeability (ml)	JIS A 6909-1995	0.23
Adhesion Strength (Under Normal Condition, N/cm <sup>2</sup> )	JIS A6910 : 1988 5.8	200
Adhesion Strength (Immersion in Water, N/cm <sup>2</sup> )	JIS A6910 : 1988 5.8	211.66
Permeability (ml)	JIS A 6910 : 1998 5.10	0

#### **Surface Preparation**

All surface must be clean, dry and free from oil, grease, dirt, contaminants and loose materials.

Dirt/Powder:	High-pressure wash (External). Clean with damp cloth (Internal). Mild detergent may be used.
Paint:	Remove unstable or old film by high-pressure wash, or scraper whichever is appropriate.
Plaster:	Remove by chisel or power grinder. Replaster to unstable surface with an approved mortar mixture.
Moisture:	High moisture causes paint defect. The moisture content of substrate should be less than 6% or 19 determined by Protimeter. All water seepage must be checked and rectified.
pH Value:	pH value should be less than 10.
Fungus:	Remove by high-pressure wash & treat with Nippon Paint Anti-Fungus Solution
Oil/Grease:	Clean off with mild detergent and a little solvent. Wash thoroughly to remove all trace.

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