

# **EP-03 Epoxy Floor Finish**

# **General Description**

Nippon Paint EP-03 Epoxy Floor Finish is a two-component high performance solvent-free amine-adduct cured epoxy self-leveling coating designed for the protection of the internal masonry surfaces such as concrete floor. It is suitable for heavy traffic and can also be used as a dust-proof floor coating.

# Features

- Tough finish
- Eco-friendly
- Excellent abrasion resistance
- Dust-proof property
- Self-leveling property

# **Recommended For**

- Interiors
  - Factory
  - School
  - Hospital
  - Heavy traffic logistic warehouse
  - Park
  - Car park
  - Access ramp

# **General Information**

Colour:	Standard colours as per colour card and special colours on request.		
Туре:	Two-pack solvent-free amine-adduct cure epoxy coating		
Finishes:	Gloss		
Application Method:	Trowel / Roller		
Theoretical Coverage:	0.8 kg/m <sup>2</sup> /coat		
Dilution:	Trace for better application		
Mixing Ratio (by weight)	Base : Hardener = 5 : 1		
Dry Film Thickness:	0.6 mm (depend on thickness required. Special Aggregates allows build up extra thickness.)		

Drying time: (at 20°C)	Touch dry: 4 hrs Hard dry: 24 hrs
Overcoat Time: (at 20°C)	24 hrs
Full Curing: (at 25℃)	7 days
Specific Gravity: (at 25℃)	1.30 (Mixed)
Solid Content: (by volume)	97%
Packing:	18 kg/set (Base : 15 kg / Hardener : 3kg)
Shelf Life:	12 months in sealed original packaging stored at room temperature and shaded place.
Plot Life: (at 25℃)	1.5 hours (Used up the mixed paint within the plot time.)

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Technical Data			
<u>Test</u>	Test Method	<u>Result</u>	
VOC Content (g/L)	USEPA Method 24	<100	
Slip Test (Peak Slip Index Reading,)	ASTM F609-05	>8	
Slip Resistance (Category of Slip Resistance)	DIN 51130 : 2003-08	R12	
Abrasion Resistance (L/μm)	ASTM D968-93	2.7	
Compressive Strength (N/mm <sup>2</sup> )	Ref.BS 6319 :Part 2 : 1983	68	
Tensile Strength (N/mm <sup>2</sup> )	Ref. HKHA /MTS (2002/2004) Specification Part D Cl 2.1.3	11.9	
Flexural Strength (N/mm <sup>2</sup> )	Ref. BS 6319 : Part3 :1983	33.4	
Impact Resistance (impact failure end point, kg.cm)	ASTM D2794-93 (2010)	20	
Pull-off Test for Adhesion (MPa)	ASTM D4541-09 Method E	4	
Solvent Resistance (by rubbing)	ASTM D5402-15 Method A	Visual rubbing trace, but no worn-out to the substrate	
Film Hardness by Pencil Test	With reference to ASTM D3363-05 (Reapproved 2011)	Gouge Hardness: 6H Scratch Hardness: F to H	

## **Recommended Painting System**

Sealer/Primer: One coat of ZF-F304 Epoxy Sealer Mid Coat: One coat of ZF-F308 Solvent Free Epoxy Sealer Undercoat & Aggregate (Optional)

Top Coat: One coat of EP-03 Epoxy Floor Finish

## **Surface Preparation**

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

Concrete: Concrete should be cured for 28 days. It should

be cleaned by abrasive blasting or be mechanically abraded to remove laitance. Resultant dust and debris should be remove by

sweeping or vacuum cleaning devices.

Strength of For the compressive strength and tensile concrete: strength of the concrete surface, they should be

larger than 25 MPa and 1.5Mpa respectively.

Defect: For cracks, hollowing or other defects, repair

with appropriate method and materials for

renovation.

Moisture: High moisture causes paint defect. The moisture

content of substrate should be less than 8%. All water seepage must be checked and rectify.

pH Value: pH value should be less than 10.

Fungus: Remove by high-pressure wash & treat with

Nippon 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

## **Paint Preparation**

Base and hardener should be mixed thoroughly and stirred continuously for 5 mins before application.

#### Limitations

Avoid painting when the temperature is below 5°C or the humidity is over 85%. Do not paint when raining and rain is expected during painting or drying process.

## Clean Up

Wash painted tools with Nippon EP-02 Thinner immediately after use.

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# **Nippon Paint EP-03 Epoxy Floor Finish**

## **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 - Base: 61°C Flash Point - Hardener: 100°C Ignition Point - Base: N/A Ignition Point - Hardener: 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.

For further enquiries, please call: **Nippon Paint (H.K.) Co., LTD** 

Tel: (852) 2699 9333 Fax: (852) 2602 8844

Website: http://www.nipponpaint.com.hk

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# ZF-F308 Solvent Free Epoxy Sealer Undercoat

# **General Description**

Nippon Paint ZF-F308 Solvent Free Epoxy Sealer Undercoat is a two-component solvent-free amine-adduct cured epoxy floor mid coat. It can provide a desired thickness depend on needs.

# **Features**

- Eco-friendly
- Excellent anti-abraded qualities
- Optimum level of durability

# **Recommended For**

- Interiors
  - Factory
  - School
  - Hospital
  - Heavy traffic logistic warehouse
  - Hanger workshop
  - Park
  - Car park
  - Access ramp

General Information			
Colour:	Tea clear	Drying time: (at 20℃)	Touch dry: 4 hrs Hard dry: 12 hrs
Туре:	Two-pack solvent-free amine-adduct cured epoxy floor mid coat	Overcoat Time: (at 20℃)	12 hrs to 5 days
Finishes:	hes: Gloss		7 days
Application Method:	Trowel / Roller	Specific Gravity (at 25 ℃)	1.12 (Mixed)
Theoretical Coverage:	1.3kg/m <sup>2</sup> per mm of DFT (for no mixing with aggregate)	Solid Content: (by volume)	89.4% (Mixed)
Dilution:	No	Packing:	24 kg/set (Base : 20 kg / Hardener : 4kg)
Mixing Ratio: (by weight)	Base : Hardener = 5 : 1	Shelf Life:	12 months in sealed original packaging stored at room temperature and shaded place
Dry Film Thickness:	1mm for 1.3 kg/m <sup>2</sup> (for no mixing with aggregate)	Plot Life (at 25 ℃)	2 hours (Used up the mixed paint within the plot time.)

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# Nippon Paint ZF-F308 Solvent Free Epoxy Sealer Undercoat

Technical Data		
<u>Test</u>	<u>Test Method</u>	Result
VOC Content (g/L)	USEPA Method 24	<100

## **Surface Preparation**

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

Concrete: Concrete should be cured for 28 days. It should

be cleaned by abrasive blasting or be mechanically abraded to remove laitance. Resultant dust and debris should be remove by

sweeping or vacuum cleaning devices.

Strength of For the compressive strength and tensile concrete: strength of the concrete surface, they should be

strength of the concrete surface, they should be larger than 25 MPa and 1.5Mpa respectively.

Defect: For cracks, hollowing or other defects, repair

with appropriate method and materials for

renovation.

Moisture: High moisture causes paint defect. The moisture

content of substrate should be less than 8%. All water seepage must be checked and rectify.

pH Value: pH value should be less than 10.

Fungus: Remove by high-pressure wash & treat with

Nippon 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

#### **Paint Preparation**

Base and hardener should be mixed thoroughly and stirred continuously for 5 mins before application.

#### 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 Nippon 65 Thinner or any strong thinner 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 - Base: 100°C Flash Point - Hardener: 53°C Ignition Point - Base: N/A

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# **ZF-F304 Epoxy Sealer**

# **General Description**

Nippon Paint ZF-F304 Epoxy Sealer is a two-component solvent-free amine-adduct cured epoxy sealer designed for application on concrete floor surfaces, it provides good adhesion to the substrate. It is suitable as a tie coat between floor substrate and solvent-free topcoat (ZF-F915).

# **Features**

- Eco-friendly
- Excellent adhesion
- Optimum level of penetration

# **Recommended For**

- Interiors
  - Factory
  - School
  - Hospital
  - Heavy traffic logistic warehouse
  - Park
  - Car park
  - Access ramp

		General Information			
Colour: Tea clear		Drying time: (at 20℃)	Touch dry: 4 hrs Hard dry: 18 hrs		
	Two-pack solvent-free amine-adduct cured epoxy floor sealer		18 hrs to 10 days		
Finishes: Gloss		Full Curing: (at 20℃)	7 days		
Application Method: Trowel / Roller		Specific Gravity: (at 20℃)	1.12 (Base paint)		
Theoretical Coverage: 0.2-0.3 kg/m²/coa	at	Solid Content: (by volume)	95 % (Mixed)		
Dilution: No		Packing:	16 kg/set (Base: 12 kg / Hardener : 4 kg)		
Mixing Ratio: (by weight)  Base: Hardener:	= 3:1	Shelf Life:	24 months in sealed original packaging stored at room temperature and shaded place		
Dry Film Thickness: 100μm		Pot Life: (at 20°C)	40 minutes (Used up the mixed paint within the pot life time)		

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### **Technical Data**

<u>Test</u>	Test Method	<u>Result</u>
VOC Content (g/L)	USEPA Method 24	<100
Benzene (%)	GB 18581	ND
Toluene (%)	GB 18581	0.03
Ethylbenzene (%)	GB 18581	ND
Xylene (%)	GB 18581	ND

<u>Test</u>	Test Method	Result
Sum of Toluene, Ethylbenzene, Xylene (%)	GB 18581	0.03
Heavy Metal - Lead (mg/kg)	GB 1858	ND
Heavy Metal - Cadmium (mg/kg)	GB 18581	ND
Heavy Metal - Chromium (mg/kg)	GB 18581	ND
Heavy Metal - Mercury (mg/kg)	GB 18581	ND

\*ND = Not Detected

## **Surface Preparation**

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Moisture: High moisture causes paint defect. The moisture

content of substrate should be less than 8%. All

water seepage must be checked and rectify.

pH Value: pH value should be less than 10.

Fungus: Remove by high-pressure wash & treat with

Nippon 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

# **Paint Preparation**

Base and hardener should be mixed thoroughly and stirred continuously for 5 mins before application.

## Limitations

Avoid painting when the temperature is below 5°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 Nippon 65 Thinner or any strong thinner immediately after use

## **Safety Information**

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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 - Base: 100°C Flash Point - Hardener: 53°C Ignition Point - Base: N/A Ignition Point - Hardener: 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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