

# UNIPOXY ANTISTATIC (Two-component)



## OVERVIEW

EPOXY F.C Unipoxy Antistatic is a two-component antistatic paint based epoxy/polyamide resin with an excellent adhesion and resistance to chemicals, water and abrasion.

### • Recommended Use

An antistatic topcoat for use in electronic, electric, computer and semi conductor industries, clean room, and other similar place.

## PHYSICAL PROPERTIES

### 1. Finish and Color

Semigloss, Yellow, Green, Grey.

Other colors are limited within following color range.

\* brightness : 6 - 8

\* chroma : below 6 (based on munsell color system.)

### 2. Drying Time

Substrate temperature	5 °C/41 °F	20 °C/68 °F	30 °C/86 °F
Set to touch	3 h	2 h	1 h
Dry through	36 h	12 h	8 h
Fully cured	7 d	4 d	3 d

\* The actual drying time is subject to the film thickness, ventilation, humidity etc., and drying time under other temperature conditions should be checked and informed by KCC.

### 3. Solids by Volume

Approx. 48 %

### 4. Theoretical Spreading Rate

9.6m<sup>2</sup>/ℓ in 50microns dry film thickness on a smooth surface

### 5. Specific Gravity

Mixed : Approx. 1.1 ~ 1.3 (Kg/L)

### 6. Flash Point

Base (PTA) : 4 °C/39°F (Closed cup)

Curing Agent (PTB) : 4 °C/39°F (Closed cup)

## APPLICATION DETAILS

### 1. Surface Preparation

Concrete should be thoroughly cured for at least 28 days at 20°C/68°F and below 80% R.H. Moisture content of the concrete surface should be below 6% Remove any oil, grease and other contaminants from the surface to be coated.

## 2. Preceding Coat

EPOXY F.C UNIPOXY LINING, MIDDLE COAT or according to specification.

## 3. Application Conditions

Do not apply when the temperature is less than 5°C/ 41°F, and relative humidity is above 85%.  
The surface temperature should be at least 3°C(37°F) above dew point to prevent condensation.

※ Remarks : Keep the recommended application condition. otherwise a film defect such as a gloss decrease and tacky by a slow dry can occur.

## 4. Mixing

PTA(Base) : PTB(Curing Agent) = 3 : 1 (by volume).

Mix separately, then combine together and mix thoroughly with a high speed dissolver for 3 minutes prior to application in the proportions as delivered.

## 5. Pot Life & Recoating Time

Temperature	10°C/50°F	20°C/ 68°F	30°C/ 86°F
Pot life	6 h	5 h	3 h
Recoating Time(min)	36 h	24 h	16 h

## 6. Application

Spray(air or airless), Roller or Brush application.

## 7. Thinning

THINNER Unipoxy Thinner or No. 024 (Thinning ratio : Max.10% by volume)

\* Remarks : Do not exceed the recommended thinning ratio , because an excess of thinning can make a color separation and a film defect. Do not dilute components separately, only the mixture.

## 8. Method

For airless spray application : Nozzle orifice : 381 μm ~ 432 μm (0.015" ~ 0.017")

Output pressure : 13.8 MPa (Airless spray data are indicative and subject to adjustment)

## 9. Typical Film Thickness

Dry Film Thickness 50 microns at a time. Two coats are recommended.

## 10. Shelf Life

12 months (Store in cool, dry, well-ventilated place.)

## 11. Packing

16 L (PTA : PTB = 12 L : 4 L).

## 12. Cautions at application

\* Electrical resistance of ET873(H) is 1 X 10<sup>6</sup>Ω ~ 9 X 10<sup>8</sup>Ω

\* ET873(H) is good for CLEANROOM CLASS 100.

\* Keep the recommended film thickness and application condition to get a good property

\* Floor coating

- A recommended dry film thickness for the optimum electric conductivity is 50~70microns at a time.
- There is possibility that electric conductivity will be bad by the poor levelling in the under 50 microns and by the thick film in the above 70microns.

\* Wall coating

- A recommended dry film thickness for the optimum electric conductivity is 40~60microns at a time.
- There is possibility that electric conductivity will be bad by the poor levelling in the under 40microns and by the thick film in the above 60microns.
- Select most suitable condition for uniform film thickness formation through coordination of roller speed and pattern , and please work.
- Because inferiority of the electric conductivity can occur by pigment precipitation Mix uniformly with roller in application.
- When middle coat is applied, pay attention so that levelling can be uniform. because levelling of paint is influenced by levelling of middle coat (solvent free or solvent epoxy).
- DFT should be formed 50 microns at a time. If regulation film thickness (100 microns) is formed repeatedly in a below recommended film thickness, inferiority of the electric conductivity can occur.
- Confirm compatibility before applying to old surfaces.

### Remarks

1. Because the paint compounds can cause a health failure such as a headache, dizziness, a skin inflammation, do not inhale vapors, spray mist and fumes and do not take in the contents.
2. During application, , wear the protective mask, protective glasses, gloves and suitable protective equipment to avoid breathing vapors or spray mist.
3. Please avoid contact with eyes and skin during application, in case of contact with skin and eyes or eating paint, get the first aids according to warning notation on the can label and then get the medical assistance by doctor immediately
4. Do not apply the paint in restricted areas. If you are obliged to apply in restricted areas, use the ventilation machine to blow out, all workers should wear a protective mask.
5. Do not allow to use the paint as fuel.
6. If you have any questions about products or you want to know safety information, you can get the technical datasheets and MSDS on our Internet Homepage([www.kccworld.co.kr](http://www.kccworld.co.kr)) or ask the customer's service.

### Issued

April, 2011

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# UNIPOXY LINING(Two-component)



## OVERVIEW

EPOXY F.C UNIPOXY LINING is a solvent-free, self levelling type epoxy floor coating with outstanding resistance to heavy abrasion and impact. It cures to a hard, tough, smooth finish and has outstanding resistance to chemicals, abrasion, impact.

### • Recommended Use

As a heavy duty middle coat on concrete floors subjected to heavy wear and tear. Used place where high impact and chemical resistance in loading areas is required. Excellent for laboratory floors, nuclear power plant, hospital, electronic, chemical plant, pharmaceutical, etc.

## PHYSICAL PROPERTIES

### 1. Finish and Color

Gloss. Green. Other colors are available on request.

### 2. Drying Time

Substrate temperature	5 °C	10 °C	20 °C	30 °C
Set to touch	10 h	6 h	3 h	2 h
Dry through	48 h	35 h	17 h	12 h
Fully cured	9 d	6 d	4 d	3 d

\* The actual drying time is subject to the film thickness, ventilation, humidity etc., and drying time under other temperature conditions should be checked and informed by KCC.

### 3. Solids by Volume

Approx. 96 %

### 4. Theoretical Coverage

2.08ℓ/m<sup>2</sup> in 2mm dry film thickness on a smooth surface.

3.12ℓ/m<sup>2</sup> in 3mm dry film thickness on a smooth surface.

### 5. Specific Gravity

Mixed : Approx. 1.43 ~ 1.53 (Kg/L)

### 6. Flash Point

Base (PTA) : 25 °C/77 °F (Closed cup)

Curing Agent (PTB) : 25 °C/77°F (Closed cup)

## APPLICATION DETAILS

### 1. Surface Preparation

Remove any oil and grease from surface to be coated with clean rag soaked in Thinner No.003 or Toluene. Do not apply coating unless concrete has cured at least 28 days at 20°C/68°F and below 80% R.H or equivalent. The surface moisture must be below 6%. The surface should be free of laitance. This can be accomplished by finishing technique, abrasive blasting, grinding or acid-etching.

## 2. Preceding Coat

KOREPOX PRIMER/SEALER UNIPOXY PRIMER 100/PUTTY or according to specification.  
UNIPOXY LINING must be coated with two times (1st: scrapping 0.5 mm coating, 2nd: main 1.5 mm coating) to prevent bubble occurrence due to concrete void and coating defect due to polluted material.

## 3. Application Conditions

Temperature during application and curing is suitable for 10°C-28°C/50°F-82°F, and below 85% R.H. and paint temperature is suitable for 20°C/68°F

### \* Remarks

Unipoxy Lining can be occurred amine blushing at condition of below 10°C, do not pollute water, ice, snow, rain and dew. If coating surface occurred amine blushing is polluted with water, coating color is changed to whiteness.

If Unipoxy Lining can be occurred amine blushing, applying TOP COAT Unipoxy Coating.

## 4. Mixing

PTA(Base) : PTB(Curing Agent) = 12 : 4 (by volume).

Mix separately, then combine together and mix thoroughly with high speed dissolver for 2-3 minutes prior to application in the proportions as delivered.

## 5. Pot Life & Recoating Time

Substrate temperature	5 °C	10 °C	20 °C	30 °C
Pot Life	40 m	30 m	20 m	15 m
R/I (Min.)	48 h	35 h	17 h	12 h
R/I (Max.)	9 d	6 d	4 d	3 d

### \* Remarks

If Unipoxy Lining is used at above of 30°C, curing speed will comes to be quick and pot life is short. So Unipoxy Lining should be kept at condition of cool interior instead of hot outside at summer season.

## 6. Thinning

Not required

## 7. Method

THINNER Unipoxy Thinner or No. 024 (Thinning ratio : Max.5% by volume)

\* Remarks : Do not exceed the recommended thinning ratio , because an excess of thinning can make a color separation and a film defect. Do not dilute components separately, only the mixture.

## 8. Method

Summer Season : Rake, Trowel.

Winter Season : Trowel (For preventing surface bubble)

## 9. Typical Film Thickness

Recommended per coat 2~3 mm dry

**10. Subsequent Coating**

EPOXY F.C TOP COAT Unipoxy Coating

**11. Shelf Life**

6 months (Store in cool, dry, well-ventilated place)

**12. Standard Packing Unit**

16 L (PTA : PTB = 12 L : 4 L)

**Remarks**

1. Optimum temperatures in application and curing is above 10°C. Surface temperatures must be at least 3°C(5°F) above dew point to prevent condensation.
2. It must be coated with two times (1st : scrapping 0.5mm coating, 2 nd: main 1.5mm coating) to prevent bubble occurrence for concrete void.
3. If it is coated under recommendation thickness or is polluted with dust, during application, it can be occurred cratering.
4. It must be coated within pot life.
5. The paint compounds would occur a headache, dizziness, loss of coordination and health problems, so do not breathe vapors, spray mist & fumes and do not eat the compounds.
6. During application, to avoid breathing vapors or spray mist, wear the protective mask, protective glasses, gloves and suitable protective equipment.
7. Please avoid contact with eyes and skin during application, in case of contact with skin and eyes or eating paint, get the first aids by the paint can label on the side and then get the medical assistance by physician immediately.
8. Do not apply the paint in restricted areas. If you are obliged to apply in restricted areas, use the ventilation machine to blow out, all workers should wear a protective mask.
9. Besides application, do not allow to use the paint as fuel.
10. If you have some questions about products or you want to know harmfulness information, you can get the technical datasheets and MSDS on our Internet Homepage ([www.kccworld.co.kr](http://www.kccworld.co.kr)) Or ask the customer's service.

**Issued**

**April, 2011.**

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## Korepox Primer/Sealer EP118 (Two-Component)

**Product Description** A polyamide cured epoxy resin based quick drying primer/sealer with excellent resistance to chemicals and water. It provides excellent adhesion to most substrates including concrete, wood, steel, etc. It assures excellent sealing and tight adhesion between the concrete and subsequent coat. It meets the requirements of ASTM C309 TYPE-I Moisture Retention of Concrete.

**Recommended Use** As a primer/sealer for use on concrete, wood floors or other substrate in areas where high anti-dust property is required such as nuclear power plant, electronic, precision equipment and chemical plant, etc.  
As a form-release agent and curing compound for the protection of concrete surfaces during the construction.

### Physical Properties

**Finish and Color** Gloss. Clear

Drying Time	Substrate temperature	5 °C/41 °F	20 °C/68 °F	30 °C/86 °F
	Set to touch	4 h	2 h	1 h
Dry through	36 h	12 h	10 h	
Fully cured	5 d	3 d	2 d	

\* The actual drying time is subject to the film thickness, ventilation, humidity etc., and drying time under other temperature conditions should be checked and informed by KCC.

**Solids by Volume** Approx. 28 % (Determined by ISO 3233)

**Theoretical Spreading Rate** 5.6 m<sup>2</sup>/L in 50 μm dry film thickness on a smooth surface.

**Specific Gravity** Approx. 0.90 for Mixture of Base and Curing agent.

**Flash Point** Base (EP118 PTA) : 1 °C/34 °F (Closed cup)  
Curing Agent (EP118 PTB) : 28 °C/82 °F (Closed cup)

### Application Details

**Surface Preparation** Remove any oil grease, dirt and any other contaminants from the surface before painting by proper method such as solvent cleaning and fresh water washing, etc.  
\* Steel : Blast cleaning to Sa 2.5 or power tool cleaning to St3, etc.  
\* Concrete : Must be cured at least 28 days at 20 °C/68 °F and below 80 % R.H., and surface must be grinding or abrasive blasted to remove laitance and other impurities. Moisture content of the concrete surface must be below 6 %.

**Application Conditions** The surface should be completely cleaned and dried. Do not apply when relative humidity is above 85 %. The surface temperatures should be at least 2.7 °C (5 °F) above dew point to prevent condensation. In confined areas, ventilate with clean air during application to assist solvent evaporation.

**Mixing** Base (Part A) : Curing Agent (Part B) = 1 : 1 (by volume)  
Mix thoroughly together prior to application in the proportions with power agitator as delivered.

**Pot Life** 8 hours at 20 °C/68 °F

**Thinning** Thinner No. 0642  
Do not dilute components separately, only the mixture.

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## Korepox Primer/Sealer EP118 (Two-Component)

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<b>Application Method</b>	Spray(air or airless), Roller or Brush application. For airless spray application ; Nozzle orifice : 381 $\mu\text{m}$ ~ 432 $\mu\text{m}$ (0.015" ~ 0.017") Output pressure : 13.8 MPa (Airless spray data are indicative and subject to adjustment)
<b>Typical Film Thickness</b>	50 $\mu\text{m}$ dry. May be specified in another film thickness than indicated depending on purpose and area of use.
<b>Recoating Interval</b>	At 20 °C/68 °F, Minimum : 12 h Maximum : Free  Prior to overcoating, remove the oil, salt, chalking material and any other contaminants on aged coating film completely by proper cleaning method such as solvent cleaning and/or fresh water washing.
<b>Subsequent Coat</b>	Korepox Filler EC264(H), Korepox F.C EU254, Korepox F.C EU225(H), Korepox Color Mortar ER2233, or according to specification.
<b>Shelf Life</b>	12 months Store in cool, dry, well-ventilated place.
<b>Standard Packing Unit</b>	16 L (PTA : PTB = 8 L : 8 L).
<b>Remarks</b>	Protect skin and eyes from direct contact with liquid paint, and avoid prolonged breathing of solvent vapors. Use with adequate ventilation. Respiratory protection is recommended when applying this product in confined spaces or stagnant air.
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