# EPOXY F.C PRIMER EP118

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 ℃/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 5.6  $m^2/L$  in 50  $\mu$ m dry film thickness on a smooth surface.

Spreading Rate

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 ℃/82 °F (Closed cup)

## **Application Details**

Surface Remove any oil grease, dirt and any other contaminants from the

Preparation 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 The surface should be completely cleaned and dried.

Conditions Do not apply when relative humidity is above 85 %. The surface temperatures

should be at least 2.7  $^{\circ}$ C (5  $^{\circ}$ 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 ℃/68 °F

Thinning Thinner No. 0642

Do not dilute components separately, only the mixture.

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

Method For airless spray application;

Nozzle orifice : 381  $\mu$ m ~ 432  $\mu$ m (0.015" ~ 0.017")

Output pressure: 13.8 MPa

(Airless spray data are indicative and subject to adjustment)

Typical 50  $\mu$ m dry.

Film Thickness May be specified in another film thickness than indicated depending on purpose

and area of use.

Recoating At 20 °C/68 °F, Minimum: 12 h

Interval 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.

Subsequent Coat Korepox Filler EC264(H), Korepox F.C EU254, Korepox F.C EU225(H),

Korepox Color Mortar ER2233, or according to specification.

Shelf Life 12 months

Store in cool, dry, well-ventilated place.

Standard Packing 16 L (PTA: PTB = 8 L: 8 L).

Unit

Remarks 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.

Issued April 2008

### **EPOXY F.C PRIMER**

## EP1183

#### 1. OVERVIEW

EPOXY F.C PRIMER EP1183 is a polyamide cured epoxy resin based quick drying primer/sealer with excellent resistance to chemicals and water.

It provides an excellent adhesion to most substrates including concrete, wood, steel. It assures an excellent sealing and tight adhesion between the concrete, hardner and subsequent coat.

It meets the requirements of ASTM C309 TYPE | `Moisture Retention of Concrete'.

- a. 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.
  - 2. As a form-release agent and curing compound for the protection of concrete surfaces during the construction.

#### 2. PHYSICAL PROPERTIES

a. Finish and Color Gloss, Clear

b. Drying Time

	5℃/41°F	<b>20</b> ℃/68°F	<b>30</b> ℃/86°F
Set to touch	4 hours	2 hours	1 hour
Dry through	36 hours	10 hours	8 hours
Fully cured	5 days	3 days	2 days

c. Solids by Volume Approx. 28%

d. Spreading Rate 5.6 m²/L in 50 microns dry film thickness on a smooth surface. (Theoretical)

e. Specific Gravity Approx. 0.91 (Kg/L) (Mixture).

f. Flash Point Base (PTA) : 1°C/34°F (Closed cup).

Curing Agent (PTB) : 28°C/82°F ( " ).

#### 3. APPLICATION DETAILS

a. Surface Preparation Remove any oil and grease from surface to be coated.

 $\star$  Steel : Blast cleaning to Sa 2 'Commercial'

\* Concrete: Must be cured at least 28 days at 20°C/68°F and below 80% R.H. and surface should be grinded or abrasive blasted to remove laitance

and other impurities.

If Concrete compressive strength is above 260 kgf/cm2, surface should be blasted more than CSP 5~6 to prevent poor adhesion.

b. Application Condition The surface must be completely clean and dry.

Do not apply when relative humidity is above 85%. The surface temperature must be at least  $3^{\circ}C(5^{\circ}F)$  above dew point to prevent condensation.

In confined areas, ventilate with clean air during application to assist solvent

evaporation.

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

Combine together and mix thoroughly prior to application in the proportions

as delivered.

d. Pot Life At 20℃/68°F, 8 hours.

e. Thinning THINNER No. 0642 or 024 (Max. 30%(Volume))

Do not dilute components separately, only the mixture.

f. Method of Application Brush, Roller, Spray(air or airless)application.

For airless spray application;

Nozzle orifice: 0.015" - 0.017"

Output pressure: 2,000 psi/140 atm.

Thinning: Max. 15% by volume.

(Airless spray data are indicative and subject to adjustment).

g. Film Thickness Recommended per coat 50 microns dry.

May be specified in another film thickness than indicated depending on

purpose and area of use.

h. Recoating Interval At 20°C/68°F, Minimum: 24 hours.

Maximum: None.

i. Subsequent Coat EPOXY F.C ER2233, EPOXY F.C EU225(H) or according to specification.

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

k. Packing Unit 16 L (PTA : PTB = 8 L : 8 L).

I. Adhesion Test Do dolly test prior to coating work. The adhesive power have to be above 1.5Mpa

m. Remarks Protect skin and eyes, 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.

n. Issued Dec, 2011