

### CapcoBond® EP

# Concrete Adhesive Epoxy based on Epoxy Resin

CapcoBond EP is a concrete adhesive based on the modified resin which is used to bond new concrete to old concrete, concrete to steel and other materials, FRP Sheet installation for retrofitting and coating different types of surfaces and making them impenetrable by high bonding and high mechanical and chemical strengths without shrinkage.

This product meets the requirements of the ASTM C881 Standard.

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Physical State and color	Component A: Clear Liquid
	Component B: Light Green Liquid
Specific Weight at 20°C	Component A: $1/14 \pm 0/02$ g/cm3
	Component B: 1/02 ± 0/02 g/cm3
	Mixture: 1/08 ± 0/05 g/cm3

## The usage and properties of Epoxy adhesive

#### The usage of the adhesive

- Bonding old concrete to new concrete, steel, and other building materials.
- Flattening and smoothing concrete surfaces
- Developing a surface layer with high mechanical strength resistant to abrasion and chemical materials
- For resin-impregnating fibers or F.R.P sheets.
- To inject into structural cracks of concrete structures.
- To inject into cracks in concrete structures
- As a primer for repair mortars based on epoxy and Portland cement for retrofitting
- As a multipurpose adhesive based on epoxy for building usages.

 Developing the impenetrable coating of all water tank surfaces, salty water, petroleum products, alkali, and weak acids.

#### The advantages of using the epoxy adhesive

- High bonding to concrete, steel, and other building materials.
- Obtaining high initial and final strengths
- High chemical resistance to petroleum products, seawater, oil, ammonia, weak aids, etc.
- High strengths and durability against impact, vibration and abrasion loadings.
- Without shrinkage and cracking when drying.
- Low density, high permeability, and impregnating properties suitable for F.R.P fibers
- Resistant to penetration of all types of fluids
- High thermal strength
- Without odor

## The instruction to use the epoxy adhesive

- Each 1.5 kg two-component packet of this product is usable for 4 to 6 square meters of the area after mixing depending on the porosity and roughness of the surface.
- The surface beneath the work must be cleaned from any types of contamination and dust. The age of the base concrete must be at least 28 days.
- It is recommended to use a low-speed mixer (A maximum of 400 rounds per minute).
  First, component B is added to component A and mixed for 2 minutes to reach a uniform mixture. Also, mixing can be carried out by hand for low volumes.
- The mixture can be implemented by a brush, trowel, or an airless pistol. It should be noted



that all surfaces must be saturated without any sloughing.

#### Necessary notes for using the product

- Avoid diluting the product with a solvent.
- Avoid putting the product in direct exposure to sunlight before mixing
- Clean the tools with a suitable solvent right after implementation

#### Safety tips for using the epoxy adhesive

This product is not categorized as a dangerous substance; however, it can be allergic to contact with the skin. Therefore, it is necessary to use a suitable gown, goggles, and mask while working. Also, this product is flammable and it is necessary to avoid smoking and welding while working. Besides, it is necessary to take the following tips into consideration:

- Blink in water for at least 15 minutes in case of eye contact
- Wash your skin with clean water for 15 minutes in case of any contact with the skin
- The contaminated clothes must be washed with suitable detergents to be usable for further work.
- It is necessary to visit a doctor if the injured individual still feels uncomfortable.

### Transportation and storage of the admixture substance

### The conditions and maintenance temperature of transportation

The allowable transportation and maintenance temperature of this product is between 5 and 30 °C. It is also necessary to consider the following tips:

 Avoid putting the container having the admixture in direct exposure to sunlight.

#### The epoxy lifetime

If the containers of this product are conserved and stored in a standard condition, they will be usable for 12 months.

#### The packaging

The components of this product are supplied in two different forms.

Packaging 1:

Component A (The epoxy resin liquid): A 1 kg bucket

Component B (The epoxy resin hardener liquid): A 0.5 kg can

Packaging 2:

Component A (The epoxy resin liquid): A 4 kg bucket

Component B (The epoxy resin hardener liquid): A 2 kg can

#### **Complementary information**

Contact the technical section of Capco Company for complementary information. You can also refer to the performance form of (CapcoBond EP) EP for more information on the performance of this product.