

# CHEMBOND EP



## Description

**Chembond EP** is a permanent epoxy adhesive for internal or external bonding of renderings, granolithic toppings, and concrete to concrete. It tolerates a degree of moisture before and during curing and is insoluble when cured. The ultimate bond strength is greater than the tensile strength of concrete. **Chembond EP** does not shrink and provides an even and stress-free bond.

## Uses

**Chembond EP** may be applied to clean, sound and durable surfaces, i.e. steel, glazed tiles and bricks, ceramic and quarry tiles, terrazzo tiles and floors. Also to smooth and worn granolithic paving's, old and worn concrete, engineering and semi-engineering bricks.

## Technical Information

25°C 2½ hours

40°C 1 hour

25°C 9½ hours

40°C 5½

Mixed density @ 25°C: 1485kg/m<sup>3</sup>

Pot life: 60min

Tack free Time 2 hours

Full cure: 7 days

## Advantage

- High Strength
- Non shrink
- Moisture tolerant
- Durable
- Resistant to chemical attack
- Supplied in pre-weighed units

## Standards

ASTM C881 Type 2 Grade 2, Class B & C.

## Application procedure

Preparation:

All surfaces must be thoroughly cleaned and prepared. All loose particles, laitance, dust, curing compounds, floor hardeners, oil, grease, fat, bitumen and paint must be removed to achieve good bond strength. Gloss surfaces must be abraded.

If oil, grease, fat, etc. are present, they should be removed before starting any other form of preparation. All laitance weak or friable concrete should be removed by chipping, grit blasting, or scabbling until a sound base is obtained.

All laitance should be removed by mechanical scarification, grit blasting, or by acid etching. Visible signs of mold growth, lichen, or algae, should be removed and treated with a fungicidal wash.

New concrete should have cured until the shrinkage and moisture movement is low. Surfaces heavily impregnated with mold oil should be degreased and grit blasted or mechanically scarified to remove the contaminated surface. All curing compounds should have disintegrated or be removed and application carried out only onto a clean, dust free surface.

## Mixing:

Carefully transfer the entire contents of the smaller container of **Chembond EP** reactor component to the larger **Chembond EP** base component tin and thoroughly mix, using a stout palette knife or a slow

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running drill with a paint mixing paddle until uniformity is achieved. This normally takes about three minutes. Do not attempt to mix only part of the contents. Do not attempt to thin **Chembond EP**.

## Guide to application:

**Chembond EP** should be applied evenly across the whole surface with a clean, short haired paint brush or a laying-on trowel. After application, the **Chembond EP** must be left to stand before over coating. The time delay will depend on surface and prevailing conditions but will typically be 60 minutes at 25°C or 45 minutes at 40°C. The **Chembond EP** should be protected during this time to prevent contamination. This is particularly necessary on horizontal surfaces.

## Temperature

Since low temperatures retard the setting and curing of **Chembond EP**, avoid working in cold weather if possible. Although **Chembond EP** will cure slowly at low temperatures, a temperature of 7°C to 10°C can be considered to be the lowest at which work on vertical rendering may proceed satisfactorily without shuttering.

## Equipment care

Use Chemi Tech's Cleaning Solvent #1 to clean tools when **Chembond EP** is still wet or tacky. Once **Chembond EP** has set hard, it can only be removed by chipping or burning.

## Coverage

2-2.7m<sup>2</sup>/kg depending upon substrate profile.

## Storage

Store under cover out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air conditioned environment.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage and disposal advice consult **Chemi Tech's** Technical Services Department.

## Safety precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapor until product fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. For further information refer to the material safety data sheet.

## Packaging

**Chembond EP** is available in 5kg units containing the base resin and reactor component.

The information and recommendations above are given in good faith based on our current knowledge and experience of the products when properly stored, handled and applied in accordance with current best practice, national standards and our recommendations. As we have no control over site conditions or methods of application, no liability can be derived from the contents of this information sheet, or from any written recommendations, or from any other advice offered. The user of the product is solely responsible for the product's suitability for the intended application and is recommended to test the suitability prior to use. We reserve the right to change the properties of our products without notice. All orders are sold subject to our current terms of sale and delivery. With the publication of this Technical Information Sheet all previous editions are no longer valid.