

# Application Instructions / Technical Data Sheet

## CAIRCON - 2K Epoxy Resin Mortar / Repair Mortar

Spalled concrete components cannot simply be repaired with new concrete. In contrast, CAIRCON 2K Epoxy Resin Mortar provides a durable **solution with good** bonding. It can be used to feather-fill and level repaired areas down to zero mm without the risk of spalling.

Epoxy resin mortar is suitable for concrete and screed floors to repair spalling, holes and defects indoors and outdoors. Thanks to its high point-load resistance, the product withstands pallet trucks and forklifts. The special properties of the epoxy resin make the mortar resistant to oils, greases, de-icing salt, acids and alkalis. Epoxy resin mortar is also suitable as a levelling compound on uneven surfaces and for mechanically and chemically highly resistant jointing and repairs in industrial areas.

In addition to industrial halls, for example for repairing uneven areas, larger holes and damage or for height levelling, epoxy resin mortar is also suitable for domestic use, for example to repair cracks in garage floor screed, stairs or basement floors. Also suitable for kerb repairs or for jointing paving stones to suppress weeds.

2K Epoxy Resin Mortar is frost-resistant, watertight, mechanically load-bearing and highly stable, making it well suited to floor preparation before subsequent **coating with CAIRCON Floor Coating, CAIRCON 2K Epoxy Resin Floor Coating or CAIRCON 2K Epoxy Resin Clear Floor Sealer.**

### Substrate preparation

Check that the substrate is suitable and provides adequate adhesion, and remove loose material. The substrate must be sound, clean, dry, free from grease and solid. First completely remove dirt, cement slurry, oxide layers, **limescale deposits or release** agents with CAIRCON Special Pre-Cleaner and rinse thoroughly. Heavily soiled, oil-contaminated or new concrete or screed surfaces must **additionally be** pre-treated with CAIRCON Etching Solution. Treatment with etching solution removes stubborn contamination and deposits from new concrete surfaces (lime) and micro-roughens the surface. Level unwanted unevenness and **gradients with CAIRCON** Levelling Compound.

**If third-party products are used for substrate preparation, verify their compatibility and a satisfactory final result by preparing a test area BEFORE coating. When third-party products are used, no liability can be accepted for a proper application result.**

### Mixing the epoxy resin mortar mixture

**The epoxy resin mixture must be blended with the supplied quantity** of quartz sand.

The resin (A) and hardener (B) components are supplied in the matched mixing ratio. Pour all the hardener into the resin component and mix thoroughly using a **mechanical stirrer at** a maximum of 400 rpm until the mixture is homogeneous (approx. 5 minutes). After mixing, transfer to a clean container and stir thoroughly again. The temperature of the components should be at least 8°C. Add the homogeneously mixed resin/hardener mixture to filler component (quartz sand) (C) and mix in with

a mechanical stirrer at a maximum of 300 rpm (approx. 5 minutes until a homogeneous mixture is achieved).

**IMPORTANT:**

**Mix at a maximum of 450 revolutions per minute. Do not apply at temperatures above 25°C.**

**Failure to follow these instructions may cause an excessive chemical reaction: the product will become hot and harden in a very short time. In this case, allow the bucket containing the product to cool before touching it and ensure good ventilation.**

**Applying the epoxy resin mortar coating**

Apply the homogeneously mixed epoxy resin mortar to the prepared repair area and compact it. For smaller spalling, defects, trip hazards and smaller areas, compact with a trowel. For larger areas, compact using, for example, a powered screed rail or board until the required surface structure has been produced.

Form the transition from horizontal to vertical surfaces by installing a triangular fillet or bottle-shaped cove made of epoxy resin mortar. The leg length should be between 30 and 50 mm.

**Technical data**

<b>Drying time</b>	mechanically loadable after 1-2 days.
<b>Coverage</b>	depending on application and extent of the repair area
<b>Pot life</b>	approx. 30 min.
<b>Application conditions</b>	<b>Do NOT</b> apply at temperatures below +15°C or above +25°C, or at humidity above 70%. During drying and the subsequent curing period of approx. 8 days, the temperature should also not fall below +15°C.
<b>Optimum application conditions</b>	Air temperature: 20-25°C; surface temperature > 15°C; relative humidity: 40-60%. Air velocity: min. 0.4 m/s (ensure good ventilation).
<b>Shelf life</b>	approx. 24 months when unopened containers are properly stored at +5°C to +25°C. Protect from frost and moisture.

**Disposal**

Once cured, it can be disposed of as construction rubble.

**Recommended additional products**

<b>Cleaning</b>	<b>CAIRCON</b> - Etching Solution, <b>CAIRCON</b> - Special Pre-Cleaner
<b>Substrate preparation</b>	<b>CAIRCON</b> - Levelling Compound
<b>Similar products</b>	<b>CAIRCON</b> 2K Epoxy Resin Primer, <b>CAIRCON</b> Floor Coating, <b>CAIRCON</b> Epoxy Resin Floor Coating, <b>CAIRCON</b> Epoxy Resin Clear Sealer

**Warnings and safety information**

Component A

Hazard pictograms: none  
Signal word: none

Component B (hardener)

Hazard pictograms:

Component C (filler)

Hazard pictograms: none  
Signal word: none

**Hazard statements:** none

**Supplemental hazard**

**statements:** none

**Precautionary statements:**

- **P101** If medical advice is needed, have product container or label at hand.
- **P102** Keep out of reach of children.



**GHS05**  
Corrosion

**Signal word: Danger**

**Hazard statements for health hazards:**

- **H318** Causes serious eye damage.

**Supplemental hazard**

**statements:** none

**Precautionary statements -**

**Prevention:**

- **P233** Keep container tightly closed.

**Precautionary statements -**

**Response:**

- **P302 + P352** IF ON SKIN: Wash with plenty of water and soap.
- **P337 + P317** If eye irritation persists: Get medical help.

**Hazard statements:** none

**Supplemental hazard**

**statements:** none

**Precautionary statements:**

- **P101** If medical advice is needed, have product container or label at hand.
- **P102** Keep out of reach of children.

