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CB EPOXY

TRANSPARENT, SOLVENT-BASED 2-COMPONENT EPOXY RESIN FOR DRY AND SLIGHTLY DAMP SURFACES.

APPLICATION

CB EPOXY is suitable as:

- A thick paint layer for dry and slightly moist but not wet surfaces
- binder for making synthetic resin mortar/concrete
- synthetic resin coating
- high-quality adhesives for concrete, stone and wood
- synthetic resin bonding layer between old and new concrete
- synthetic resin adhesive layer for synthetic resin bonded mortars and concrete (PC)

Sewers:
Protection of the flow profile in sewer pipes and a tight bonding of the socket and spigot ends in pressure pipes.

Industry:
Preservation of sulphur bunkers by surface treatment. Production of impact and wear resistant mortar with CB Epoxy aIs binder, especially for the chemical and petroleum industry.

Concrete roads and airports:
For the finishing of concrete surfaces as well as for the levelling of worn concrete surfaces. Repair of edges in expansion joints with synthetic resin mortar, binder CB Epoxy.

Bridge construction:
When mixed with gravel or quartz sand, the synthetic resin is suitable for the bonding and bonding of concrete slabs.

PRODUCT DESCRIPTION

CB Epoxy is a solvent free synthetic resin based on epoxy resin. It has excellent adhesion to concrete and cement mortars and is resistant to water, chemicals, mineral oil, petrol, many alkalis and acids (see resistance table), thermal loads and wear. With **CB Epoxy** a high compressive, bending and adhesion strength is achieved. The material has only a slight yellowing tendency.

CHARACTERISTICS AND PROPERTIES

Base	: Epoxy resin
Solvents	: Solvent-free*.
Color	: Transparent
Consistency	: Liquid
Density	: approx. 1.1 kg/dm³
Processing	: brushes, rollers
Coating thickness	: depending on the application
Mixing ratio in weight parts	: component A : component B 10 : 3,5
Processing time	: approx. 35 minutes at +20 °C in 10 kg packaging
Necessary layers	: 1 to 2
Consumption: paint layer	: approx. 200 to 400 g/m² per layer
Adhesive layer	: approx. 400 to 700 g/m²
Time between 2 layers	: 0,5 to 10 hours
Residue	: 100 %
Walkable after	: 1 day at + 20 °C
Curing time	: 3 to 4 days at +20°C

Required air and object temperature during processing: + 8 °C to + 35 °C

Water vapour diffusion resistance factor	: µH2O approx. 50,000
Building material class average	
DIN EN 13501-1	: Highly flammable Efl
Shelf life	: 1 year
Cleaning, diluent	: dilution AX

(* According to the guidelines of the German BouwChemie).

USER INSTRUCTIONS

Mixing

In the case of 2-component synthetic resins, the quantity of component B is geared to component A (exception: large packaging). If possible, do not produce smaller quantities. To make a processable mixture, run component B completely into component A. In the case of 2-component packagings with a separate plastic closure in the lid, the upper part of the can is pushed through twice with a steel pin so that component B runs completely into the lower part of the canister with component A. The upper part of the canister is then pushed through with a steel pin so that component B runs completely into the lower part of the canister with component A. This eliminates any inaccuracies during dosing.

The components are mixed using a slow-moving drill with a stirring trowel in the area of the of component A. After mixing, there shall be no more visible streaks in the mass. Therefore, when mixing, pay particular attention to the bottom and walls of the canister. The mixing time is 2 minutes. By pouring the quantity into an empty container after mixing and stirring again for 1 minute prevents mixing errors. When using smaller quantities from individual packs, observe the mixing ratio of 10 parts by weight of component A to 3.5 parts by weight of component B as stated on the pack.

Processing time

The processing time depends on temperature and pack size. Larger quantities and higher temperatures shorten the processing time.

Processing time (minutes) depends on temperature and quantity.

temperature(°C) **Quantity (kg)**	**10**	**20**	**30**
3	60	40	20
10	60	35	15

Attention!
If there is still moisture in the substrate, do not expose the fresh, not yet cured finishing coat to the sun, otherwise water vapour pressure will cause blistering. A gray veil can form if there is early contact with water (before complete drying). After curing, it can only be removed to a certain extent by washing with diluted hydrochloric acid. We advise against using CB Epoxy when it rains or when there is a risk of rain. The temperature of the air and the object must be at least + 8 °C. The temperature of the air and the object must be at least + 8 °C. In the case of gas- and watertight coatings, particles are repeatedly released as a result of vapour pressure, resulting in frost-thaw salt damage. Single-sided application of the finishing coat clearly has the most adverse effect, the closer it is to the surface. Damage due to vapour pressure often occurs on concrete surfaces in the open air, which are in contact with the ground via walls, or in cases where the concrete was only dry on the surface before finishing, but still damp on the inside. When using high-quality reaction plastics, such as epoxy or polyurethane resin, the concrete must have a compressive strength of at least 30 N/mm² and an adhesion strength of the concrete surface _ 1.5 N/mm².

Processing as paint
The substrate may be dry or slightly moist and must be solid, rough, clean, free of oil and grease. Smooth, sintered, polished, glazed, cement-bound surfaces are not suitable for use as a substrate, unless they have first been roughened by grit blasting.
Completely remove bituminous and tarry layers from the surface. Then treat one or two times. When treating on concrete, stucco or screed, a clean, solid, oil- and grease-free surface is necessary. Remove cement sludge.. The still sticky primer coat is followed by a

single or double treatment with CB Epoxy. The drying time between two treatments must be such that the first treatment is still sticky when the next one is applied, otherwise optimum adhesion between the two treatments is not to be expected. Sanding down the treatment with quartz sand allows a longer drying time between treatments and increases the adhesion. Depending on the substrate, the quantity to be applied, temperature and air circulation, this time can be ± 0.5 to 10 hours.

Repair of damaged substrates
Holes and wear spots are cleaned, Iosse parts removed and primed. After draining the solvents (after approx. 1 to 2 hours) with CB Epoxy primer (the primer must still be sticky), the holes are filled with synthetic resin mortar. Mixing ratio: 1 vol-dl. CB Epoxy and 3 to 5 vol-dl. quartz sand. For holes up to 2 cm use a grain size of 0 to 4 mm, above 2 cm depth use a grain size of 0 to 8 mm.

Recipe of a synthetic resin mortar/concrete:

Aggregate	Wet quartz or river sand (approx. 5% W/W water)
Grain Size	Depending on the layer thickness, largest grain = 1/3 of the layer thickness
Mixing Ratio	1 volume part CB Epoxy, 4 volume parts sand
Processing time	approx. 30 minutes at +20 °C
Layer thickness	6 mm tot 20 mm

As the material is rather tough, use a mixer when mixing. The application of a finishing floor or layer of CB Epoxy is done in the normal way with a glitzy trowel or trowel. If an anti-slip surface is desired, the freshly laid screed is sprinkled with sand or fine gravel. For making a CB Epoxy screed, clean, damp sand may be used. Pourable surfaces can be obtained by reducing the amount of sand. In the case of casting mortar, also take into account the grain structure, depending on the layer thickness.

CONSUMPTION/DOSAGE

Paint layer : 200 to 400 g/m² per layer
Adhesive layer : 400 to 700 g/m²
Finishing coat : depending on the height of the cut, e.g. 1 vol.dl. CB Epoxy and 4 vol.dl. sand 2,9 kg/m² CB Epoxy per m² and cm layer thickness
Bonding : depending on the height of the cut and the surface roughness : approx. 1 to 2 kg/m²Dichtheid

PACKAGING

CB Epoxy is delivered in transparent in:

- 2-component packaging; 1.0 kg, 3.0 kg, and 8.0 kg

Can be kept for at least 12 months in a well-sealed, original, cool and dry packaging.
Epoxy resin-based products tend to crystallise partially in the event of frost. Frozen material can be processed again by heating. Allow the material to cool down again before mixing, otherwise it will not be possible to process it due to too rapid hardening.

SHELF-LIVE

2 Years.