

Technical Data Sheet



AB-ZEROPOX® 810

2-C-EP-special resin



Description:

2-component epoxy resin, medium viscosity, unfilled
very low emission

Characteristics:

- approved against rising damp
- primer, key coat and mortar resin
- very high chemical resistance
- very high mechanical resistance
- inert and harmless once cured

Application:

AB-ZEROPOX 810 is a special epoxy resin for concrete surfaces where rising damp is expected. **AB-ZEROPOX 810** is a very low emission epoxy resin of medium viscosity, which is suitable as a primer, key coat and binder for mortars. The resin offers universal use as it mixes well with a wide range of dry fillers i.e. quartz sand, quartz powder, basaltic grit, hard aggregates, granite or silicon carbide. **AB-ZEROPOX 810** is suitable for industrial areas and public buildings e.g. schools, hospitals, kindergartens, shopping malls and other indoor projects with high requirements to room climate. **AB-ZEROPOX 810** meets the strictest criteria regarding the lowest emissions of indoor air pollutants.

Consumption:

2 x 0.4 - 0.5 kg/m², always sprinkle with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²).

Resistant to:

- water / sewage
- alkalis
- mineral oil
- dry temperature max. 80°C
- saline solutions
- diluted acids
- lubricants and fuels
- wet temperature short-term max. 60°C

Technical Data:

Mixing ratio A : B	100 : 50 by weight (2 : 1)
Density (23°C)	approx. 1.10 g/cm ³
Volume solids	approx. 100 %
Viscosity (23°C)	approx. 750 mPa·s ± 100
Compressive strength (DIN EN ISO 604)	60 - 100 N/mm ² (depending on filler ratio)
Tensile strength (DIN EN ISO 178)	30 N/mm ²
Water absorption	< 1.5 %
First contact with water	after 24 hours (23°C)

Details for application:

Pot life (12°C / 23°C / 30°C)	approx. 60 minutes / 40 minutes / 20 minutes
Substrate temperature	minimum 12°C up to maximum 30°C
Material temperature	15°C - 25°C
Maximum relative humidity of air	at 12°C: 75 % (dew point +3°C) at > 23°C: 85 % (dew point +3°C)
Duration between applications (if sprinkled with quartz sand, the duration will increase)	12°C: min. 16 hours max. 36 hours 23°C: min. 8 hours max. 24 hours 30°C: min. 8 hours max. 24 hours
Curing time / foot traffic (12°C / 23°C / 30°C)	36 hours / 24 hours / 18 hours
Curing time / mech. resistance (12°C / 23°C / 30°C)	96 hours / 72 hours / 48 hours
Curing time / chem. resistance (12°C / 23°C / 30°C)	8 days / 6 days / 5 days
All above values are approximate and may be used as a guideline for specifications	

Packaging:

25 kg - pails
200 kg - barrel
1000 kg - container

Colour:

clear

Storage:

12 months, unopened in original drums under dry conditions and a temperature of 15 - 25°C.
At temperatures < 10°C crystallisation is possible. Please consult us.

1. Surface preparation

Prior to the application the substrate must be prepared by mechanical means using qualified equipment e.g. Blastrac® shot blasting or high pressure water jetting.

Minimum requirements:

- free of cement laitance, dust, oil, fat and other contaminants
- open textured, absorbent surface
- pull off strength min. 1.5 N/mm²
- concrete residual moisture max. 6 %
Please consult us!

See also "general preparation and application instructions" sheet.

2. Application

Prior to mixing, the temperature of the components must be between 15 - 25°C. Mix the components in the correct ratio using a suitable low speed electric mixer (300 - 400 rpm) for at least 3 minutes or until a completely homogeneous mixture has been achieved. Put the mixed material into a clean container and mix again for at least 1 minute more. After mixing, fillers can be added whilst stirring constantly. Distribute the mixture immediately onto the surface. Depending on the condition of the substrate we recommend applying a primer and a key coat or a filled primer. Use a rubber squeegee to spread the primer evenly and finish with a paint-roller. The key coat (1 : 0.8 up to 1 : 1 w/w) and the filled primer (1 : 1 up to 1 : 2 w/w) can be formulated using **AB-ZEROPOX 810** and clean, dry, tempered quartz sand. The mixture should be applied by notched trowel or scraper. The applied coating must always be lightly sprinkled with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²). Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

Primer: approx. 0.4 - 0.5 kg/m².

Key coat: 1 : 0.8 up to 1 : 1 filled with clean, dry quartz sand Ø 0.1 - 0.3 mm.

Consumption: approx. 0.75 kg/m² resin plus clean, dry quartz sand.

Damp concrete:

The damp concrete surfaces must be free of standing water. It must be ensured that there is no water on top of the concrete or in the pores. On concrete substrates where rising damp is evident, always apply a second coat of **AB-ZEROPOX 810**.

3. System description

The following figures are for ambient and surface temperatures of 15 - 23°C. Both high and low temperatures will influence the filler ratio and the consumption per m².

AB-ZEROPOX 810 can be used in various ways. The most common applications are:

Primer / seal coat:

As primer apply **AB-ZEROPOX 810** with approx. 0.4 - 0.5 kg/m² and sprinkle the surface lightly with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²).

After curing, seal the surface with a second coat of **AB-ZEROPOX 810**, but without sprinkled quartz sand. Consumption: approx. 0.4 - 0.5 kg/m².

Primer / key coat:

As primer apply **AB-ZEROPOX 810** using approx. 0.4 - 0.5 kg/m² and lightly sprinkle the surface with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²). Depending on substrate conditions apply an additional primer or a key coat with **AB-ZEROPOX 810** and sprinkle the surface lightly with clean, dry quartz sand 0.4 - 0.8 mm (approx. 0.5 kg/m²). Once cured it is possible to apply any **AB-ZEROPOX-** or **AB-ZEROPUR-** system.

N/B:

The priming and sealing work may only be carried out at constant or falling temperatures; otherwise blistering and consequent leakage can occur.

The use of the product and the expected wear and tear will determine the choice of fillers.

N/B:

UV radiation cause discolouration.

4. Packaging

25 kg - sets

16.66 kg component A

8.34 kg component B

delivery in barrels

2 x 200 kg component A

1 x 200 kg component B

5. Health and safety

GISCODE: RE30

Wear suitable protective clothing, gloves and eye / face protection. Adequate ventilation of the working area is recommended. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When using do not eat, drink, smoke and keep away from sources of ignition. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Safety Data Sheet.

6. EU Directive ("Decopaint-RL"):

Acc. to the EU Directive 2004/42/EG the maximum allowed content of VOC (Product category All / j / type SB) is 500 g/l (Limit 2010) for the ready to use product. This product is in accordance with the EU Directive 2010.

AB-ZEROPOX 810; 2.01/17.03.20. Before use, please check that this is the actual edition of the Technical Data Sheet. The information contained in this Technical Data Sheet is of a general nature and is provided in good faith and we accept no liability for errors or omissions. Because use and application of this product are out of our control and depend, concerning substrate, load and method of application, on the particularities of the individual case, our advice, verbal, written or based on tests, does not exempt the applicator from testing the suitability of the products for the intended use.

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