Technical Data Sheet

AB-POX® 010

2-C-EP-special resin

Description:

2-component special epoxy resin, medium viscosity, colourless, unfilled
VOC < 500 g/l, free of nonylphenol

Characteristics:

- very deep penetration
- fast curing
- resistant to thermal deterioration
- thermal resistant
- very high mechanical resistance
- resistant to mastic asphalt up to +250ºC
- inert and harmless once cured

Application:

AB-POX 010 is a special epoxy resin for damp concrete surfaces, “green” concrete and concrete surfaces where rising damp is expected. **AB-POX 010** has been tested in accordance with TL/TP-BEL-EP of ZTV-BEL-B on old **and green** concrete. **AB-POX 010** is suitable as primer and key coat. This particular chemical formulation will guarantee excellent adhesion between the substrate and subsequent coats.

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
- mastic asphalt up to +250ºC
- saline solutions
- diluted acids
- lubricants and fuels (incl. aviation fuel)
- rising damp

Technical Data:

Mixing ratio A : B	100 : 38 by weight (2.63 : 1)
Density (23°C)	approx. 1.10 g/cm³
Volume solids	approx. 100 %
Viscosity (23°C)	approx. 700 mPa·s ± 100
Compressive strength (DIN EN ISO 604)	60 - 90 N/mm² (depending on filler ratio)
Tensile strength (DIN EN ISO 178)	> 30 N/mm²
Water absorption	< 1.0 %
Shore D - hardness (DIN EN ISO 868)	> 80
Glass transition temperature	> 50°C
First contact with water	after 24 hours (23°C)

Details for application:

Pot life (8°C / 23°C / 30°C)	approx. 40 minutes / 25 minutes / 15 minutes
Substrate temperature	minimum 8°C up to maximum 30°C
Material temperature	15°C - 25°C
Maximum relative humidity of air	at 8°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)	8°C: min. 16 hours max. 36 hours 23°C: min. 6 hours max. 24 hours 30°C: min. 3 hours max. 12 hours
Curing time / foot traffic (8°C / 23°C / 30°C)	24 hours / 12 hours / 6 hours
Curing time / mech. resistance (8°C / 23°C / 30°C)	48 hours / 16 hours / 12 hours
Curing time / chem. resistance (8°C / 23°C / 30°C)	5 days / 3 days / 2 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 %
- substrate temperature > 8°C

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-POX 010** 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-POX 010**.

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-POX 010 can be used in various ways. The most common applications are:

Primer / seal coat:
As primer apply **AB-POX 010** 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-POX 010**, but without sprinkle quartz sand.
Consumption: approx. 0.4 - 0.5 kg/m².

Primer / key coat:
As primer apply **AB-POX 010** 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-POX 010** and sprinkle the surface lightly with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²). Once cured it is possible to apply any **AB-POX**- or **AB-PUR** - 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
18.12 kg component A
6.88 kg component B

5. Health and safety
GISCODE: RE55
Avoid inhalation of the vapours and contact with skin. 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 AII / 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.

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