Technical Data Sheet

AB-POX® 013

2-C-EP-high reaction resin

Description:

2-component epoxy resin, medium viscosity, colourless, unfilled
VOC < 500 g/l, free of nonylphenol, application by hand or 2-component equipment

Characteristics:

- application by hand or machinery
- good wetting characteristics
- very fast curing
- resistant to thermal deterioration
- very high mechanical resistance
- resistant to rising damp
- inert and harmless once cured

Application:

AB-POX 013 is a special epoxy resin with a high reactivity which is suitable for use as a primer on cementitious indoor areas. The fast curing properties will reduce the duration between coats to approx. 3 hours at a surface temperature of 16°C. **AB-POX 013** is also suitable for use on concrete surfaces where rising damp is expected. **AB-POX 013** can be used on both old **and green** concrete. This particular chemical formulation will guarantee excellent adhesion between the substrate and subsequent coats. For larger areas we recommend mixing and applying **AB-POX 013** by using a mechanical procedure. On these occasions we advise the use of large containers (barrels). Contact us for further information.

Consumption:

1 - 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
- saline solutions
- diluted acids
- lubricants and fuels (incl. aviation fuel)
- rising damp

Technical Data:

Mixing ratio A : B	100 : 50 by weight (2 : 1)
Density (23°C)	approx. 1.10 g/cm³
Volume solids	approx. 100 %
Viscosity (23°C)	approx. 1000 mPa·s ± 200
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

Details for application:

Pot life (8°C / 23°C)	approx. 20 minutes / 15 minutes
Substrate temperature	minimum 8°C up to maximum 25°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. 6 hours max. 24 hours 16°C: min. 3 hours max. 16 hours 25°C: min. 1 hour max. 12 hours
Curing time / foot traffic (8°C / 16°C / 25°C)	6 hours / 3 hours / 1 hour
Curing time / mech. resistance (8°C / 16°C / 25°C)	12 hours / 6 hours / 3 hours
Curing time / chem. resistance (8°C / 16°C / 25°C)	3 days / 2 days / 1 day
All above values are approximate and may be used as a guideline for specifications	

Packaging:

10 kg - pails for application by hand
200 kg - barrel for application by machinery

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
Mix **AB-POX 013** with a 2-component machine or for smaller quantities do it by hand. Prior to mixing, the temperature of the components must be between 15 - 25°C. Mix the components in the correct ratio by dynamic or static system. Distribute the mixture immediately onto the surface. For small quantities mix the components in the correct ratio using a suitable low speed electric mixer (300 - 400 rpm) for at least 2 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. Distribute the mixture immediately onto the surface. Depending on the condition of the substrate we recommend applying a second primer. Use a rubber squeegee to spread the primer evenly and brush it carefully into the surface with a paint-roller. 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.
Damp concrete:
The damp concrete surfaces (water-cement ratio < 0.5) 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 013**.

3. System description
The following figures are for ambient and surface temperatures of 15 - 23°C. Both high and low temperatures will influence the consumption per m².
AB-POX 013 can be used in various ways. The most common applications are:

Primer / seal coat:
As primer apply **AB-POX 013** 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 013**, but without sprinkled quartz sand.
Consumption: approx. 0.4 - 0.5 kg/m².
In case of a subsequent coat 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.
Where coats exceed > 1 mm the exothermic heat can lead to blistering.

Mix only small quantities of AB-POX 013 (max. 10 kg) and distribute it immediately. Should this not be done, it could result in an exothermic reaction and possible smoke.

N/B:
UV radiation cause discolouration.

4. Packaging
10 kg - sets
6.66 kg component A
3.34 kg component B
delivery in barrels
2 x 200 kg component A
1 x 200 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.

AB-Polymerchemie GmbH
Tjüchkampstraße 21 - 24
D - 26605 Aurich
Tel.: +49 (0)4941 - 604360
Fax.: +49 (0)4941 - 6043643
info@ab-polymerchemie.de
www.ab-polymerchemie.de