AB-ZEROPUR® 8035 1-C-PU-binder for stone flooring systems

Data Sheet	ABP	AB-ZEROPUR® 8035 1-C-PU-binder for stone flooring systems
Description:	1-component polyurethane binder / resin, colourless, v VOC < 1 %, very low emission	unfilled
Characteristics:	 light stable and weather resistant moisture-curing tough and hard glossy finish 	 for indoor and outdoor applications low consumption easy to use inert and harmless once cured
Application:	 AB-ZEROPUR 8035 is an odourless, light stable polyurethane binder for processing decorative flooring systems (natural stone and coloured quartz) for indoor and outdoor use. Application areas are e.g. exhibition rooms, balconies, terraces, loggias, arcades, walkways (horizontal surfaces only). AB-ZEROPUR 8035 reacts with humidity and cures to a highly weather resistant and abrasion resistant film. Prior to the application we always recommend to make a test mixture to control the suitability of the filler / aggregate. N/B: Rubber tyres and wheels or chemical softeners etc. will mark the surface. Please consult us! 	
Consumption:	approx. 5 - 6 % binder on the mixture (depending on the grain size / grading curve).	
Resistant to:	water / salt solutionsdiluted acids and alkalis	common industrial air pollutiondetergents
Technical Data:	Mixing ratio n/a Density (23°C) Volume solids Viscosity (23°C)	1-component approx. 1.15 g/cm³ approx. 100 % approx. 600 mPa·s ± 200
Details for application:	Pot life (20°C) Substrate temperature Material temperature Minimum relative humidity of air Maximum relative humidity of air Rainproof (20°C / 60 % relative humidity of air) Curing time / foot traffic (20°C / 60 % rel. humidity) Curing time / mech. resistance (10°C / 23°C / 30°C) Curing time / chem. resistance (10°C / 23°C / 30°C) All above values are approximate and may be used as	1-component, approx. 60 minutesminimum 10°C up to maximum 30°C15°C - 25°C40 % (dew point +3°C)80 % (dew point +3°C)approx. 12 hoursapprox. 24 hours96 hours / 72 hours / 48 hours7 days / 5 days / 5 dayss a guideline for specifications
Packaging:	1.25 kg - pails 10 kg - pails, other packaging on request	
Colour:	clear	
Storage:	6 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.	

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Technical

1. Surface preparation

Concrete / cement screed

Prior to the application the substrate must be prepared by mechanical means using qualified equipment, e.g. Blastrac[®] shot blasting.

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. 4 % Depending on the condition of the substrate the surface must be made <u>non-porous</u> by the application of a primer and / or key coat using **AB-POX 002** or **AB-ZEROPOX 803**, followed by a light sprinkle of clean, dry quartz sand.

On concrete surfaces where there is rising damp, residual moisture or damp concrete of maximum 6 %, AB-POX 010 or AB-ZEROPOX 810 must be used. Once cured, carefully remove excess sand.

See also "general preparation and application instructions" sheet.

2. Application

Prior to mixing, the temperature of the product must be between 15 - 25°C. Mix the material using a suitable compulsory mixer (e.g. Zyclos) for at least 3 minutes or until a homogeneous mixture has been achieved. After mixing, fillers can be added whilst stirring constantly. Monitor consistency of the mixed material. It is sufficient if the fillers are evenly covered with resin. Do not use too much resin (no too fat lime mortar). Too much resin can lead to foaming and aesthetic problems. We always recommend to apply a test mixture. Distribute the mixture immediately onto the dry surface. AB-ZEROPUR 8035 can be mixed with clean, dry, tempered colour sand or suitable granules in the correct mixing ratio. Use a trowel or rake to spread the mixture evenly as uniform thickness. Then level and compact the surface with a smoothing trowel. Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

3. System description

The following figures are for ambient and surface temperatures of $15 - 23^{\circ}$ C. Both high and low temperatures will influence the filler ratio and the consumption per m².

Primer:

AB-ZEROPOX 803, clear

Consumption: approx. $0.3 - 0.5 \text{ kg/m}^2$, lightly sprinkle with clean, dry, quartz sand \emptyset 0.4 - 0.8 mm (approx. 0.3 kg/m²).

Key coat (if required):

AB-ZEROPOX 803 + quartz sand Consumption: approx. 0.6 kg/m² resin plus quartz sand, lightly sprinkle with clean, dry, quartz sand \emptyset 0.4 - 0.8 mm (approx. 0.3 kg/m²).

Quartz- / decor- / mortar systems: AB-ZEROPUR 8035, clear

The binder / resin content of the mixture may be approx. 5 - 6 %, depending on the filler.

The layer thickness and consumption depends on the grain size.

The largest aggregate size should be $\frac{1}{3}$ of the layer thickness, employing this method will improve the wear resistance.

When using fine quartz grains, the smoothness of the surface can be significantly improved by cleaning the tools during the application.

N/B:

If the binder / resin content is too high, it may result in creating foam / bubbles due to CO_2 - development.

AB-ZEROPUR 8035 offers a long pot life of at least 3 hours at 20°C. The application time of the mortar is less, i.e. maximum approx. 60 minutes.

At temperatures less than +10°C the curing time takes longer. Low temperature causes a longer reaction time. Similarly, a higher temperature in combination with a high air humidity shortens the application time of the mortar to approx. 30 - 45 minutes. During curing, the surface must be protected from direct contact with water and from strong sunlight.

4. Chemical resistance

- Excellent resistance to:
- diluted acids
- diluted alkalis
- salt water
- sewage
- aliphatic solvents
- mineral oils

Leaves, flowers, red wine, coffee etc. contain organic dyes, which may cause discolouration.

5. Packaging

1.25 kg - drum 10 kg - drum

6. Health and safety GISCODE: PU40

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.

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

Acc. to the EU Directive 2004/42/EG the maximum allowed content of VOC (Product category All / i / 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-ZEROPUR 8035; 1.00/15.10.20. 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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