

Technical Data Sheet



AB-ZEROPUR® 835

2-C-PU-elastic coating



Description:

2-component polyurethane coating, coloured
 VOC < 1 %, practically emission-free, tested acc. to AgBB - scheme

Characteristics:

- tough-elastic
- self-levelling
- crack-bridging (1 - 2 mm static)
- up to 80 % natural / renewable raw materials
- high chemical resistance
- high mechanical resistance
- absorbs sound
- inert and harmless once cured

Application:

AB-ZEROPUR 835 due to its tough-elastic properties it is suitable for industrial applications i.e. production plants, offices, supermarkets, showrooms, hospitals and schools. **AB-ZEROPUR 835** can be used on concrete, cement screed, magnesia, anhydrite / gypsum, steel, timber and industrial asphalt floors. Please ask for detailed information. With **AB-ZEROPUR 835** you can create a flooring system that absorbs sound, is hard-wearing, seamless, hygienic and decorative. **AB-ZEROPUR 835** is suitable for public buildings e.g. schools, hospitals, kindergartens, shopping malls and other indoor projects with high requirements to room climate. **AB-ZEROPUR 835** has been approved in accordance with the AgBB - scheme for health-related evaluation of emissions from building products used for application indoors. **AB-ZEROPUR 835** must always be sealed with a system specific topcoat.

Consumption:

2.0 - 5.0 kg/m², additional filling with e.g. quartz sand Ø 0.1 - 0.3 mm is possible.

Resistant to:

- water
- detergents (test required)
- suitable for washing rooms
- wet temperature max. 40°C
- steel work platforms that vibrate
- static cracks 1 - 2 mm (0°C / 20°C)

Technical Data:

Mixing ratio A : B	100 : 22 by weight (4.5 : 1)
Density (23°C)	approx. 1.40 g/cm ³
Volume solids	approx. 100 %
Viscosity (23°C)	approx. 2500 mPa·s ± 500
Shore A - hardness ((DIN EN ISO 868)	approx. 70
Elongation at break (DIN 53504)	50 - 130 % depending on quartz sand filler
Fire resistance (DIN 4102)	class 1 (< 50 mm)
Abrasion (1000 g / 1000 rev.) acc. to Taber with topcoat	20 mg

Details for application:

Pot life (10°C / 23°C / 30°C)	approx. 40 minutes / 25 minutes / 15 minutes
Substrate temperature	minimum 10°C up to maximum 30°C
Material temperature	15°C - 25°C
Maximum relative humidity of air	at 10°C: 75 % (dew point +3°C) at > 23°C: 85 % (dew point +3°C)
Curing time / foot traffic (10°C / 23°C / 30°C)	48 hours / 24 hours / 20 hours
Curing time / mech. resistance (10°C / 23°C / 30°C)	96 hours / 72 hours / 48 hours
Curing time / chem. resistance (10°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:

30 kg - pails

Colour:

pebble grey approx. RAL 7032 (other colours are available on request)
 - due to raw material variations and manufacturing techniques, a slight colour / batch difference may occur -

Storage:

6 months, unopened in original drums under dry conditions and a temperature of 15 - 25°C.
 At temperatures < 15°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.

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 non-porous by the application of a primer and / or key coat using **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-ZEROPOX 810 must be used. Please consult us!

Once cured, carefully remove excess sand. 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. **AB-ZEROPUR 835** can be applied as a pure product or mixed with clean, dry, tempered quartz sand Ø 0.1 - 0.3 mm. The mixing ratio (w/w) will be determined by the type of use / application. To apply use a notched trowel (rubber or metal). Spread **AB-ZEROPUR 835** as an even coat ensuring uniform thickness. **The freshly applied coating should be finished off with a spiked roller within 5 minutes to achieve an excellent surface and to remove bubbles. This is even more important when filled with quartz sand. In order to improve the optical quality (e.g. reddish shades of grey), the fresh coating should be treated with a suitable nylon roller (e.g. 14 mm pile height).** Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

AB-ZEROPUR 835 can also be applied to substrates that are at minimum temperatures +5°C, however in these conditions the consumption, application and curing will be affected in a negative manner.

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.

Primer:

AB-ZEROPOX 803, clear

Consumption: approx. 0.3 - 0.5 kg/m², lightly sprinkle with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²).

Pore-sealer:

AB-ZEROPUR 835, pebble grey

Consumption: approx. 0.6 - 1.0 kg/m².

Self-levelling coating:

AB-ZEROPUR 835, pebble grey

Consumption: approx. 2.0 - 5.0 kg/m².

Topcoats (1 - 2 x depending on use):

AB-ZEROPUR 873 Flex, clear

- silk matt -

Consumption: approx. 120 - 150 g/m²

or

AB-ZEROPUR 873 Flex P, pebble grey

- silk matt -

Consumption: approx. 120 - 150 g/m².

System thickness: 2 - 4 mm.

Crack-bridging: 1 - 2 mm

N/B:

UV radiation cause discolouration.

N/B:

AB-ZEROPUR 835 must always be sealed with a suitable topcoat and a regular maintenance to protect the rubber-like surface against dirt.

Professional maintenance will increase the service life of the flooring system.

4. Chemical resistance

Diesel	short-term
Disinfectants	resistant
Petrol	short-term
Sodium lye 20 %	resistant
Sulphuric acid 20 %	resistant
Water	resistant
Aliphatic solvents	short-term

(please consult us)

Tested for 3 months at 20°C; whether discolouration did occur was not considered.

5. Packaging

30 kg - sets

24.60 kg component A

5.40 kg component B

6. Health and safety

GISCODE: PU40

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 / 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-ZEROPUR 835; 2.00/07.01.19. 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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