

# Technical Information



# AB-ZEROPUR® 872

2-C-PU-decorative binder, clear, glossy



**Description:** 2-component polyurethane binder, colourless  
very low emission

- Characteristics:**
- tough-hard
  - UV - resistant / resistant to yellowing
  - very easy to clean / glossy finish
  - high abrasion resistance
  - suitable for indoor and outdoor use
  - inert and harmless once cured

**Application:** **AB-ZEROPUR 872** is primarily used as topcoat on flooring systems, which have been broadcasted in excess with coloured quartz sand or PVA - flakes (tough-hard EP- and PU - systems, ask for advice!).  
Consumption: approx. 0.2 - 0.4 kg/m<sup>2</sup> per coat / depending on broadcast aggregate and desired effect!

As anti-slip topcoat (approx. R11 / FSC) for tough-hard PU - levelling coatings **AB-ZEROPUR 872 T** is available (please consult us for application).  
Consumption: approx. 0.2 kg/m<sup>2</sup> (application by using a suitable paint roller and paint grid!).

**AB-ZEROPUR 872** is also suitable for marble / coloured quartz flooring systems (stone carpets) for indoor areas (prior to the application we always recommend to make a test mixture to control the suitability of the filler / aggregate and to find out the pot life of the mixture).  
Consumption: 4.5 kg mixed with 50 kg filler / aggregate (means approx. 8 % binder content).

**AB-ZEROPUR 872** is relatively insensitive to tyre marks (rubber wheels or chemical softeners etc.).

**Consumption:** Depending on use.

- Resistant to:**
- diluted acids and alkalis
  - saline solutions
  - wet temperature max. 40°C
  - solvents (please consult us)
  - lubricants and fuels

<b>Technical Data:</b>	Mixing ratio A : B	100 : 160 by weight (1 : 1.6)
	Density (23°C)	approx. 1.20 g/cm <sup>3</sup>
	Solids	> 99 %
	Viscosity (23°C)	approx. 700 mPa.s ± 150
	Abrasion (1000 g / 1000 rev.) acc. to Taber CS 10	20 mg

<b>Details for application:</b>	Pot life (12°C / 23°C / 30°C)	approx. 120 minutes / 90 minutes / 45 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 coats (should the duration between coats be too soon, curing of the subsequent coat will be affected)	12°C: min. 48 hours    max. 60 hours 23°C: min. 24 hours    max. 36 hours 30°C: min. 16 hours    max. 24 hours
	Curing time / foot traffic (12°C / 23°C / 30°C)	48 hours / 24 hours / 16 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)	7 days / 5 days / 4 days
	All above values are approximate and may be used as a guideline for specifications	

**Packaging:** 4.5 kg - pails

**Colour:** clear

**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

### 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/mm<sup>2</sup>
- 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

### Quartz flooring:

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. 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 aesthetic problems. We always recommend to apply a test mixture.** Distribute the mixture immediately onto the surface. Use a trowel to evenly apply the mixture as uniform thickness. Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

### Sealer / topcoat

The surface that is to be sealed must be in a sound condition and of good quality in general. The self-levelling coating must have sufficiently cured to accept foot traffic. The surface must be clean, dry and free of oil, fat and other

contaminants. 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. **Distribute the material immediately onto the surface.** To spread **AB-ZEROPUR 872** as an even coat use a rubber squeegee or fine notched trowel. To attain an acceptable finish use a suitable paint-roller. Avoid overlapping where possible. Only the use of a paint-roller may lead to a finish that has shadows; this is normally due to an uneven thickness (WFT). Should the application for any reason be interrupted, tape the edges of the applied material. **AB-ZEROPUR 872** can also be used as an unfilled sealer coat or topcoat on surfaces which have been broadcasted. In this case, sharply scrape using a rubber rake the material over the top of the surface, and finish with a short-haired paint-roller. 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°C. Both high and low temperatures will influence the consumption per m<sup>2</sup>, the levelling and the curing properties.

### Quartz- / decor- / mortar systems:

The set **AB-ZEROPUR 872**, 4.5 kg mixed with approx. 50 kg filler what means approx. 8 % binder content.

**AB-ZEROPUR 872** offers a long pot life of at least 3 hours at 20°C.

The processing time of the mortar is much less, maximum 1.5 - 4 hours (depending on the fillers).

### Sealer / topcoat:

**AB-ZEROPUR 872**, clear  
Consumption: approx. 0.2 - 0.4 kg/m<sup>2</sup>, depending on use.

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

## N/B:

a) Alkaline fillers will speed up the reaction and reduce the pot life. **Put the mixed material always into a clean container**; do not process out off the original drums.

b) Mechanical wear and tear can affect the aesthetic quality of the surface (pale scratch marks). In time the surface will become marked.

c) High temperatures in combination with high relative humidity of air will reduce the pot life.

d) Prior to the application we always recommend to make a test mixture with the fillers to find out the pot life.

e) Due to the different types of tyres, we recommend to put in showrooms high-grade steel or glass plates below the tyres / wheels.

## 4. Chemical resistance

Depending on the requirements, we recommend to test the chemical resistance.

## 5. Packaging

4.5 kg - sets

1.73 kg component A

2.77 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 872**; 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.

## **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