

# Technical Data Sheet



# AB-ZEROPOX® 803 N

2-C-EP-universal resin



**Description:** 2-component epoxy resin, medium viscosity, colourless, unfilled  
very low emission

- Characteristics:**
- primer, key coat and mortar resin
  - very high chemical resistance
  - very high mechanical resistance
  - inert and harmless once cured

**Application:** **AB-ZEROPOX 803 N** is a special epoxy resin of medium viscosity, which is suitable as a primer, key coat and binder for mortars. The resin offers universal use as it mixes well with a wide range of dry fillers i. e. quartz sand, quartz powder, basaltic grit, hard aggregates, granite or silicon carbide. **AB-ZEROPOX 803 N** has been developed for industrial areas and public buildings e. g. schools, hospitals, kindergartens, shopping malls and other projects with high indoor air requirements.

UV radiation causes discolouration, which is typical for epoxy resins.

**Consumption:** 0.3 - 0.5 kg/m<sup>2</sup> as primer, always sprinkle with dry quartz sand Ø 0.4 - 0.8 mm (0.5 kg/m<sup>2</sup>).

- Resistant to:**
- water / sewage
  - alkalis
  - mineral oil
  - dry temperature max. 80°C
  - saline solutions
  - diluted acids
  - lubricants and fuels
  - wet temperature short-term max. 60°C

<b>Technical Data:</b>	Mixing ratio A : B	100 : 50 by weight (2 : 1)
	Density (23°C)	approx. 1.10 g/cm <sup>3</sup>
	Volume solids	approx. 100 %
	Viscosity (23°C)	approx. 850 mPa·s ± 100
	Compressive strength (DIN EN ISO 604)	60 - 100 N/mm <sup>2</sup> (depending on filler ratio)
	Tensile strength (DIN EN ISO 178)	30 N/mm <sup>2</sup>
	Water absorption	< 1.5 %
	First contact with water	after 24 hours (23°C)

<b>Details for application:</b>	Pot life (12°C / 23°C / 30°C)	approx. 45 minutes / 25 minutes / 15 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 applications (if sprinkled with quartz sand, the duration will increase)	12°C: min. 32 hours max. 48 hours 23°C: min. 16 hours max. 24 hours 30°C: min. 12 hours max. 24 hours
	Curing time / foot traffic (12°C / 23°C / 30°C)	36 hours / 20 hours / 12 hours
	Curing time / mech. resistance (12°C / 23°C / 30°C)	96 hours / 48 hours / 24 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:** 25 kg - pails

**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.

#### 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 %

**On concrete surfaces where there is rising damp or residual moisture of maximum 6 %, AB-ZEROPOX 810 must be used. Please consult us!**

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 : 2.5 w/w) can be formulated using **AB-ZEROPOX 803 N** 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/m<sup>2</sup>). 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. Consumption:

#### Primer:

approx. 0.3 - 0.5 kg/m<sup>2</sup>, lightly sprinkle with dry quartz sand Ø 0.4 - 0.8 mm.

#### Key coat:

approx. 0.75 kg/m<sup>2</sup> resin  
1 : 0.8 up to 1 : 1 filled with clean, dry quartz sand Ø 0.1 - 0.3 mm, lightly sprinkle with clean, dry quartz sand Ø 0.4 - 0.8 mm.

### 4. 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 m<sup>2</sup>.

**AB-ZEROPOX 803 N** can be used in various ways. The most common applications are:

#### Primer / key coat:

As primer apply **AB-ZEROPOX 803 N** using approx. 0.3 - 0.5 kg/m<sup>2</sup> and lightly sprinkle the surface with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m<sup>2</sup>). Depending on substrate conditions apply an additional key coat with **AB-ZEROPOX 803 N** and sprinkle the surface lightly with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m<sup>2</sup>). Once cured it is possible to apply any **AB-ZEROPOX-** or **AB-ZEROPUR** - system.

#### Epoxy screed / mortar:

**The use of the product and the expected wear and tear will determine the choice of fillers.**

E. g. 10 mm, impervious EP - mortar: approx. 1 : 7 filled with Silimix 282.

#### N/B:

UV radiation causes discolouration.

### 5. Chemical resistance

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

### 6. Packaging

25 kg - sets  
16.66 kg component A  
8.34 kg component B

### 7. Health and safety

#### GISCODE: RE30

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.

### 8. 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-ZEROPOX 803 N**; 1.02/01.09.23. 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 24  
D - 26605 Aurich  
Tel.: +49 (0)4941 - 604360  
Fax.: +49 (0)4941 - 6043643  
Info@ab-polymerchemie.de  
www.ab-polymerchemie.de