

# Technical Data Sheet



## AB-PUR® 210

1-C-PU-clear coat, glossy

**Description:** 1-component polyurethane coating, colourless, unfilled  
VOC < 500 g/l, low solvent content

- Characteristics:**
- UV - resistant
  - crack-bridging 0.3 mm
  - flexible at low temperatures down to -30°C
  - low solvent content
  - glossy finish
  - high mechanical resistance
  - permeable to water vapour diffusion
  - high CO<sub>2</sub> - resistance
  - non-foaming
  - inert and harmless once cured

**Application:** AB-PUR 210 is suitable for use on concrete, cement screed, timber and fibre cement surfaces. AB-PUR 210 contains a blocked hardener, and due to the presence of humidity in the air begins to react with the enclosed polyol. When this reaction occurs, the blocked part is released into the atmosphere and gives off a bad odour during the first days. For this reason AB-PUR 210 is only used outdoors. AB-PUR 210 cures at temperatures as low as +1°C and a relative humidity of 90 %. AB-PUR 210 is used as a system on balconies, terraces, galleries and parking areas. AB-PUR 210 can be applied either as a topcoat / sealer coat, or as a filled coating. Please consult us.

**Consumption:** 0.2 - maximum 0.6 kg/m<sup>2</sup> per coat (solvent retention).

- Resistant to:**
- water / salt water
  - alkalis
  - transformer oil
  - diluted acids
  - kerosene
  - aliphatic solvents

<b>Technical Data:</b>	Mixing ratio n/a	1-component
	Density (23°C)	approx. 1.00 g/cm <sup>3</sup>
	Volume solids	approx. 70 %
	Viscosity (23°C)	approx. 1300 mPa·s ± 200
	Tensile strength (DIN 53504)	after 7 days > 10 N/mm <sup>2</sup>
	Elongation at break (DIN 53504)	after 30 days > 200 %
	Water vapour diffusion factor	approx. 4.000 µ
	CO <sub>2</sub> diffusion resistance factor	> 700.000 µ
	Flash point	> 45°C

<b>Details for application:</b>	Pot life (1°C / 23°C / 30°C)	1-component
	Substrate temperature	minimum 1°C up to maximum 30°C
	Material temperature	15°C - 25°C
	Minimum relative humidity of air	40 % (dew point +3°C)
	Maximum relative humidity of air	90 % (dew point +3°C)
	Duration between applications (if sprinkled with quartz sand, the duration will increase)	1°C: min. 24 hours max. 36 hours 23°C: min. 16 hours max. 24 hours 30°C: min. 12 hours max. 24 hours
	Curing time / foot traffic (1°C / 23°C / 30°C)	24 hours / 16 hours / 12 hours
	Curing time / mech. resistance (1°C / 23°C / 30°C)	72 hours / 24 hours / 24 hours
	Curing time / chem. resistance (1°C / 23°C / 30°C)	7 days / 5 days / 5 days
	All above values are approximate and may be used as a guideline for specifications	

**Packaging:** 10 kg - pails

**Colour:** clear

**Storage:** 3 months, unopened in original drums under dry conditions and a temperature of 15 - 25°C (store upside down).

## 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-POX 002**, **AB-POX 010** or **AB-POX 013**.

**On concrete surfaces where there is rising damp, residual moisture or damp concrete of maximum 6 %, AB-POX 010 must be used.**

#### Timber

The surface must be carefully prepared by using a grinder. Tropical woods should not be coated (those rich in resin).

#### Fibre cement

After a thorough cleaning process, two sealer coats should be applied.

#### Minimum requirements:

- free of cement laitance, dust, oil, fat and other contaminants
- open textured, absorbent surface

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 low speed electric mixer (300 - 400 rpm) for at least 3 minutes or until a homogeneous mixture has been achieved. After mixing, fillers can be added whilst stirring constantly. Distribute the material immediately onto the surface. To apply use a fine notched trowel or short-haired paint-roller. Spread **AB-PUR 210** as an even coat ensuring uniform thickness. Avoid ponding on the surface. Ensure that the maximum consumption is not exceeded and that the solvent has completely evaporated before applying a subsequent coating. Should the coating be applied too thick, it will affect the curing time. Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

If the coating at temperatures below +8°C is applied too thick, curing time will be affected (solvent retention). At low temperatures the surface should always be sprinkled with quartz sand to assist with the release of solvent and chemical reaction.

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

#### Balconies and terraces:

**AB-PUR 210** can be used in various ways. The most common applications are:

#### Primer:

#### **AB-POX 002, AB-POX 010 or AB-POX 013.**

Consumption: approx. 0.3 - 0.5 kg/m<sup>2</sup>, lightly sprinkle with clean, dry quartz sand Ø 0.1 - 0.3 mm (approx. 0.5 kg/m<sup>2</sup>).

#### Levelling coating:

#### **AB-PUR 210**, clear

approx. 1 : 0.5 filled with dry, coloured quartz sand Ø 0.4 - 0.7 mm.

Consumption: approx. 0.6 kg/m<sup>2</sup> resin plus dry, coloured quartz sand.

#### Sealer / topcoat:

#### **AB-PUR 210**, clear.

approx. 0.3 kg/m<sup>2</sup>.

System thickness: approx. 1.5 mm.

As an alternative you may apply a coat of pebble grey **AB-PUR 211** by roller. Consumption: approx. 0.35 kg/m<sup>2</sup> lightly sprinkle with coloured flakes to design a decorative surface. After curing apply a sealing coat / topcoat with **AB-PUR 210** clear.

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

## 4. Chemical resistance

Excellent resistance to:

- diluted acids
- diluted alkalis
- salt water
- sewage
- aliphatic solvents
- mineral oils
- temperatures of +80 down to -30°C

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

## 5. Packaging

10 kg - drum

## 6. Health and safety

#### GISCODE: PU50

**AB-PUR 210** contains solvents. Should there be insufficient ventilation, wear suitable respiratory equipment. 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.