

Technical Data Sheet



AB-PUR® 211

1-C-PU-coating, silk matt

Description: 1-component polyurethane coating, coloured
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
- silk matt finish
- high mechanical resistance
- permeable to water vapour diffusion
- high CO₂ - resistance
- non-foaming
- inert and harmless once cured

Application: **AB-PUR 211** is suitable for use on concrete, cement screed, timber and fibre cement surfaces. **AB-PUR 211** 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 as a bad odour during the first days. **AB-PUR 211** is only used outdoors. **AB-PUR 211** cures at temperatures as low as +1°C and a relative humidity of 90 %. **AB-PUR 211** is used as a system on balconies, terraces, galleries, parking areas as a UV- and high abrasion resistant topcoat / sealer coat. Please consult us.

Consumption: 0.3 - maximum 0.7 kg/m² per coat (solvent retention).

Resistant to:

- water / salt water
- alkalis
- transformer oil
- diluted acids
- kerosene
- aliphatic solvents

Technical Data:

Mixing ratio n/a	1-component
Density (23°C)	approx. 1.30 g/cm ³
Volume solids	approx. 65 %
Viscosity (23°C)	approx. 700 mPa·s ± 200
Shore A - hardness (DIN EN ISO 868)	after 7 days > 90
Tensile strength (DIN 53504)	after 7 days > 10 N/mm ²
Elongation at break (DIN 53504)	after 30 days > 200 %
Water vapour diffusion factor	approx. 4.000 µ
CO ₂ diffusion resistance factor	> 700.000 µ
Flash point	> 45°C

**Details for
application:**

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: 7 kg - pails
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: 3 months, unopened in original drums stored in 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/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-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 211** 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 m².

Balconies and terraces:

AB-PUR 211 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/m², lightly sprinkle with clean, dry quartz sand Ø 0.1 - 0.3 mm (approx. 0.5 kg/m²).

Levelling coating:

AB-PUR 211, pebble grey approx. 1 : 0.5 filled with clean, dry quartz sand Ø 0.4 - 0.7 mm.

Consumption: approx. 0.6 kg/m² resin plus dry, quartz sand.

Sealer / topcoat:

AB-PUR 211, pebble grey. approx. 0.3 kg/m².

System thickness: approx. 1.5 mm.

Topcoat on broadcast surfaces:

AB-PUR 211 is suitable as a UV- and high abrasion resistant topcoat on quartz sand sprinkled surfaces that will be applied on balconies, terraces, galleries and parking areas.

Consumption: 2 x approx. 0.4 - 0.5 kg/m²

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

7 kg - drum

30 kg - drum

6. Health and safety

GISCODE: PU50

AB-PUR 211 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.

AB-PUR 211; 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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