Technical Data Sheet

AB-PUR® 380

2-C-PU-hybrid coating

Description:

2-component polyurethane - hybrid coating, coloured
VOC < 500 g/l

Characteristics:

- elastic / crack-bridging
- self-levelling
- self-ventilating
- weather resistant
- suitable for both indoor and outdoor areas
- high mechanical resistance
- impervious to liquids
- absorbs sound
- inert and harmless once cured

Application:

AB-PUR 380 is suitable for use as a protective coating system on balconies, terraces and galleries, and has excellent elasticity and crack-bridging characteristics. It must be applied in conjunction with suitable primers and topcoats such as **AB-POX** - primers and **AB-PUR** - topcoats. **AB-PUR 380** is not resistant to fade and discolouration, therefore the surface must always be broadcast in excess with coloured flakes. The design / finish may be created to suit individual preferences. The self-levelling properties and other excellent characteristics of this product make it easy to use. The cured surface must be sealed with **AB-PUR 730 N**.

Consumption:

2.5 - 3.5 kg/m², depending on use and application.

Resistant to:

- water / sewage / salt water
- diluted acids
- diluted alkalis
- lubricants and fuels short-term
- thermal short-term max. 60ºC
- construction projects that vibrate
- elastic / plastic down to -20ºC

Technical Data:

Mixing ratio A : B	100 : 12 by weight (8.33 : 1)
Density (23°C)	approx. 1.35 g/cm³
Volume solids	approx. 100 %
Viscosity (23°C)	approx. 6000 mPa·s ± 1000
Shore D - hardness (DIN EN ISO 868)	approx. 35 (after 2 days)
Elongation at break (DIN 53504)	approx. 100 %

Details for application:

Pot life (12°C / 23°C / 30°C)	approx. 40 minutes / 30 minutes / 20 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)
Curing time / foot traffic (12°C / 23°C / 30°C)	24 hours / 12 hours / 8 hours
Curing time / mech. resistance (12°C / 23°C / 30°C)	48 hours / 24 hours / 12 hours
Curing time / chem. resistance (12°C / 23°C / 30°C)	5 days / 3 days / 2 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
- 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 < 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/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**, 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-POX 010 must be used. Once cured, carefully remove excess sand.
Hard asphalt must be prepared by shot blasting or abrasive grinding. Minimum 50 % of the filler aggregates must be exposed.
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. Distribute the mixture immediately onto the surface. To apply use a notched trowel (rubber or metal). Spread **AB-PUR 380** 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.** After a duration of approx. 2 - 3 hours broadcast the surface in excess with suitable coloured micro-flakes (1 mm). 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 filler ratio and the consumption per m².

Primer:
AB-POX 010, clear
Consumption: approx. 0.4 - 0.5 kg/m², lightly sprinkle with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²).

Key coat:
AB-POX 010 + quartz sand
Consumption: approx. 0.6 kg/m² resin plus quartz sand, lightly sprinkle with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²).

Self-levelling coating:
AB-PUR 380, pebble grey
Consumption: approx. 2.5 - 3.5 kg/m², broadcast in excess with suitable coloured micro-flakes (1 mm).
Consumption: approx. 0.8 kg/m².
Once cured, remove the excess flakes and carefully abrade the surface using a grinder that is equipped with a carborundum paper disc. Afterwards, thoroughly clean the surface with an industrial vacuum cleaner.

Topcoat (after approx.16 hours):
AB-PUR 730 N, clear
Consumption: 0.2 - max. 0.5 kg/m².

System thickness: approx. 2.5 - 3 mm.

Hard asphalt surfaces can directly be coated with **AB-PUR 380** without the use of a special primer.

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

N/B:
UV radiation cause discolouration.

4. Chemical resistance

Ammonia 5 %	resistant
Apple juice	resistant
Beer	resistant
Citric acid < 10 %	resistant
Coffee	resistant
Diesel	resistant
Disinfectants	short-term
Engine oil	short-term
Hydrochloric acid 10 %	short-term
Phosphoric acid 25 %	resistant
Salt water / water	resistant
Sewage	resistant
Wine / red wine	resistant

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

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

5. Packaging
30 kg - sets
26.79 kg component A
3.21 kg component B

6. Health and safety
GISCODE: RE30
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 AII / 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.

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