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SCHOMBURG

**Technical Data Sheet**

# AQUAFIN®-1K

**Art.-No. 2 04248**

## Mineral-based waterproofing slurry

- Rigid waterproofing slurry
- Sulphate resistant
- For interior and exterior use
- For walls and floors
- Water tight
- Easy, economic processing
- Can be coated, smoothed or sprayed using a suitable device
- Responsible for slightly damp substrates without primers
- Vapour-permeable, resistant to frost and ageing-resistant
- Building waterproofing in accordance with DIN 18535
- Proof of use against negative pressing water
- Proof of use against concrete-damaging water in accordance with DIN 4030

SCHOMBURG GmbH & Co. KG Detmold
P-2003-4-3739/03
KIWA MPA Bautest GmbH

**Areas of use:**

For substrates that are subsequently not subject to cracking.
Pre-sealing for: Waterproofing in direct ground, plinth waterproofing and transverse waterproofing in and below walls in accordance with DIN 18533 for water impact classes W1.1-E, W1.2-E and W4-E.
Subsequent waterproofing in accordance with WTA Leaflet 4-6 against soil moisture, non pressure water and pressure water (with suitable construction).
Waterproofing of containers and tanks up to water impact class W1-B and cracking class R0-B in accordance with DIN 18535, up to 4 m.
Structural sealing:

- For the waterproofing in direct ground of walls and substrates of new and existing buildings on building components made of concrete or masonry work.
- Waterproofing against the internal pressure water of container constructions (e.g. service water tanks, waste water tanks).
- Horizontal waterproofing against capillary rising moisture in and underneath walls.

**Technical Data:**

| | |
|---|---|
| Basis: | sand/cement, polymer modified |
| Grain size: | < 1,0 mm |
| Density of mixed mortar: | approx. 1.85 g/cm³ |
| Mixing: | approx. 6.7 litres water per 25 kg AQUAFIN-1K<br>approx. 1.6 litres water per 6 kg AQUAFIN-1K |
| Pot life *): | approx. 60 min. |
| Substrate/ application temp: | +5° C to +30° C |
| Adhesive strength, in accordance with DIN EN 1542: | > 0.5 N/mm² after 28 days |
| Water impermeability, in accordance with DIN 12390-8 (PG MDS) 28 days, 1.5 bar: | passed |
| Impermeability to water under negative hydrostatic pressure: | 1.5 bar |
| Water impermeability, as installed, in accordance with PG MDS: | 1 bar |
| Cleaning tools: | with water whilst still fresh, difficult to remove once dried |
| Packaging: | 25 kg bags, 6 kg bags |
| Storage: | 12 months when stored dry in the original unopened packaging. Use opened packaging promptly. |

Exposure class/material consumption/dry film thickness:

- Ground moisture/non-standing seepage water: 3.5 kg/m²/approx. 2.0 mm
- Standing seepage water / pressure water: 4.5 kg/m²/approx. 2.5 mm

# AQUAFIN®-1K

In accordance with the WTA information sheet "Retrospective construction waterproofing of structural components in contact with the ground":

- Ground moisture/non-standing seepage water: min. 3.5 kg/m² (approx. 2 mm)
- Standing seepage water/pressure water: min. 5.3 kg/m² (approx. 3 mm)

Waterproofing to DIN 18195, part 7:

- from pressure water from the inside: min. 3.5 kg/m² (approx. 2 mm)

It is necessary to apply 1.1 mm as a wet coat for every mm dry film.

Exposure *): - Rainproof on substrates to falls after approx. 8 hours, exposure to standing water is to be avoided
- Foot traffic after approx. 1 day
- Against hydrostatic pressure after approx. 7 days

*) at +23° C and 50% relative humidity. Due to weathering, the given data can lengthen or shorten.

**Substrate preparation:**

The substrate must be load-bearing, largely flat with an open pored texture and a closed surface finish. It must be free from gravel pockets, cavities, gaping cracks and ridges, dust and free from adhesion inhibiting substances such as e.g. oil, paint, laitance and loose areas. It may be damp but not wet. Substrates which are suitable are tight jointed concrete, render PII and PIII, flush pointed masonry work. Smooth out open textured substrates such as pre-cast concrete blocks and dense concrete blocks and uneven masonry work, with ASOCRET-M30.
Pre-slurry the base slab/wall transition and corners with AQUAFIN-1K and construct a coved fillet, of min. side length of approx. 4 cm, onto the wet slurry coat with either ASOCRET-M30. Once through dried, carry out waterproofing measures with AQUAFIN-1K.

**Product application:**

1. Prepare the substrate appropriate to its requirements.
2. Pre-wet the substrate, so that it is matt-damp at the time AQUAFIN-1K is applied. Prime very absorbent or poorly sanded substrates with ASO-Unigrund. The primer must be dry before subsequent work steps are implemented.
3. Place approx. 1.6 or 6.7 litres of clean water into a clean mixing bucket, mix in as much powder until a homogenous lump free mix is achieved. With a mechanical mixer (approx. 500–700 rpm) a mixing time of approx. 2–3 minutes is necessary.
4. Apply two coats of AQUAFIN-1K by brush or trowel. Only apply the second and successive coats once the one beneath will not be damaged by foot traffic or during application (approx. 4–6 hours at +20° C/60% RH). An even thickness is achieved by using a 4 to 6 mm notched trowel followed by smoothing flat. Avoid applying thicknesses greater than 2 kg/m² as a single coat as there is a risk of cracks appearing in the waterproof layer due to the high binder content.

Alternatively AQUAFIN-1K can be spray applied with suitable equipment such as e.g. HighPump M8 (Peristaltic pump), HighPump Small or HighPump Pictor (screw feed pump). Information on the above can be obtained from Dittmann Sanierungstechnik GmbH, Hohen Neuendorf.

Drainage and protection boards in building sections covered with earth:

Protect waterproof membranes from weathering and mechanical damage through suitable protective measures according to DIN 18195, part 10. Only install protective layers once the membrane has fully dried, suitable protective and drainage boards can be fixed on dabs with COMBIDIC-1K with perimeter insulation being fully bedded with tight joints using COMBIDIC-2K-CLASSIC or COMBIDIC-2K-PREMIUM. Drainage to be incorporated according to DIN 4095.

**Advice:**

- Protect areas not being treated from AQUAFIN-1K.
- The substrate must be matt damp. Avoid puddle formation.
- Once the coating has hardened, keep the surface damp for at least 24 hours.
- Protect the fresh coating from rain, wind, frost and direct sunlight.
- In strong sunshine, work in the shade against the direction of the sun.
- A load-bearing sound substrate is a prerequisite for a permanent bond between the substrate and the coating system. Poorly bonded substances and those destructive to the bond must be completely removed. High pressure jet washing (> 400 bar), very high pressure jet washing (up to 2000 bar) and abrasive blast techniques with solid abrasive media are suitable methods. The final work process must involve cleaning by pressure washing.
- In service water containers temperatures mostly around +10° C to +15° C are to be expected. In order to ensure a full hydration of the cement, keep the coating damp for an adequate amount of time (constant relative humidity > 80%) and protect from drying out. In general 7 days will suffice. At the same time avoid the formation of condensation or standing water during this time span after application. Where there is risk of dropping below the dew point (condensation) install a dehumidifier until the mortar has cured. Under no circumstances blow in uncontrolled warm air or use direct heat sources (e.g. gas or oil heaters).
- Do not attempt to re-life mortar that has already started to stiffen by adding more water or fresh mortar as there is a risk of inadequate strength development.
- If there is a risk of cracking in the substrate following application then, dependent on the area of application, use AQUAFIN-RS300 or AQUAFIN-2K/M-PLUS.
  Observe current valid regulations.

Please observe a current valid EU Safety data sheet.
**GISCODE: ZP1**