AQUAFIN®-1K

Mineral waterproofing slurry

Material number	Package type	Colour	Units / pallet	Pc/package
204248003	25 kg, bag	Grey	42	1
204248004	5 kg, bag	Grey	200	4
204248003SXP	25 kg, bag	Grey	42	1

Fields of application / waterproofing

- For presealing building components in direct ground contact for water impact classes W1.1-E, W1.2-E and W4-E
- As retroactive building waterproofing in accordance with WTA datasheet 4-6
- for waterproofing containers and basins (W1-B, W2-B in accordance with DIN18535)
- for the repair of sulphate-damaged substrates
- for process and waste water tanks
- for interior and exterior use
- For walls and floors

Product features

- Rigid mineral-based waterproofing slurry
- Resistant to concrete-damaging water (XA2), in accordance with DIN 4030

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Advantages

- Highly sulphate-resistant
- Resistant to frost and ageing
- Can be applied by brush, spatula and spray
- watertight
- easy and economical application
- Adheres to matt damp substrates without primers
- Vapour permeable

Technical Data

Material properties

Product components	1 component system
Base material	Pre-blended dry mortar
Consistency	Paste, non slump
Density, ready to use product (ISO 1183-1)	approx. 1.85 kg/dm³
Watertightness (PG MDS/FPD)	
Wasserdichtheit gegen negativ drückendes Wasser (WTA-Merkblatt 4-6)	
Tensile adhesion strength DIN EN 1542	≥ 0.5 N/mm²
Crack classes DIN 18535	R0-B
Classification of the reaction to fire in accordance with DIN EN 13501-1	E

Mixing

Mixing time	approx. 3 minutes
Water addition	Approx. 6.7 l per 25 kg
Water addition (percentage)	approx. 26 - 27 %

Application

Substrate/application temperature	approx. 5 - 30 °C
Pot life	approx. 60 minutes
Method of application, max. layer thickness per application step	up to 1 mm
Consumption	approx. 3.50 - 5.30 kg/m²
Consumption (surface levelling) per mm layer thickness	approx. 1.75 kg/m²
Second application step after waiting time	approx. 4 - 6 hours
Foot traffic after	approx. 24 hours
Withstands pressurised water after	≥ 7 days

Processing equipment

Aids/tools

- Stirrer (approx. 500-700 rpm)
- Suitable mixing paddle
- Trowel
- Serrated or layer-thickness trowel
- Flat trowel
- Brush
- Spray equipment

Manual processing

- Can be trowelled off
- Can be painted on with paint rollers
- Applicable with a brush

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Machine application

AQUAFIN®-1K can be mechanically applied. For precise information, see the additional Technical Information No. 43.

Suitable substrate

- Plasters P II and P III
- Masonry work
- Concrete

Preparing the substrate

Requirement for substrate

1. Load-bearing
2. Even
3. Pore open
4. Sealed in the surface
5. Free of adhesion inhibiting substances

Preparing the details

Depressions > 5 mm and mortar pockets, plaster grooves in brickwork, open butt or bed joints, damaged areas, large pored substrates or uneven masonry work must be levelled in advance with ASOCRET-M30 (cement-based mortar).

Preparing the surface

1. Pre-moisten the dry substrate so that it is matt damp at the time of application.
2. Extremely absorbent and slightly sandy substrates must be primed with AQUAFIN-Primer.
3. The primer must be completely dry / must have reacted fully before the subsequent work steps are carried out.

Base slab-wall transition

1. Pre-screen with AQUAFIN®-1K or ASOCRET-M30 in a consistency that is able to screen.
2. While still wet, install a sealing cove with an edge height of at least 4 cm made of ASOCRET-M30.
3. After drying, carry out the waterproofing with AQUAFIN®-1K.

Application

Mixing

1. Put the Approx. 6.7 l per 25 kg water into a clean mixing bucket and mix with the powder component to produce a homogeneous, lump-free mass.
2. Mixing time is approx. 2-3 minutes.

Waterproofing

1. Apply AQUAFIN®-1K in a minimum of two application steps ensuring it is free of pores.
2. The second application (and following) step can take place when the first application step can no longer be damaged by reworking.
3. An even layer thickness is achieved using a coating thickness trowel or notched trowel and then smoothing.
4. An application thickness of more than 2 kg/m² in one application step can lead to cracking.

Cleaning tools

Clean tools thoroughly with water after use.

Storage conditions

Storage

Store in a cool and dry place. Min. 12 months in the original canister. Promptly use opened container.

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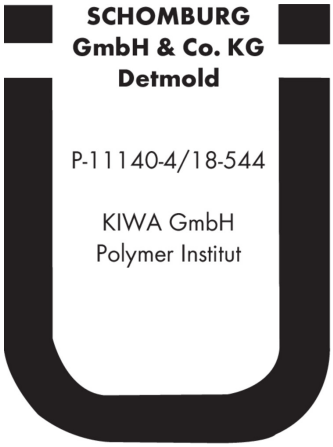
Notes

- Protect surfaces that are not to be treated from the effects of AQUAFIN®-1K!
- In case of strong sunlight, work against the movement of the sun in shaded areas.
- The substrate may be matt damp before application. The formation of puddles must be avoided.
- After the coating has hardened, keep the surface damp for ≥ 24 hours.
- Protect the fresh coating from rain, wind, frost and direct sunlight.
- A load-bearing substrate is a precondition for a long-lasting bond between the substrate and coating system. Less adhesive and bond-damaging substances must be completely removed. High-pressure water jetting (> 400 bar; < 2000 bar) and jets with fixed blasting agents are suitable measures. The last application step must be cleaning with pressure water jetting.
- In rooms with high humidity and/or insufficient ventilation (e.g. water containers), dropping below the dew point (condensation formation) may occur on the surface. This must be avoided by taking suitable measures such as by using condensation dryers. Direct heating or uncontrolled blowing warm air is not permitted.
- In the service water tanks, temperatures around +10 °C to +15 °C are usually expected. In order to ensure complete hydration of the cement, the coating is kept damp for a sufficiently long period (constant relative humidity of > 80%) and protected against drying. 7 days are generally sufficient for this.
- Do not add water or new mortar to existing AQUAFIN®-1K mortar that has already set in order to make it workable again. (Risk of inadequate strength development)
- For substrates that are subsequently prone to cracking, use AQUAFIN®-RS300, AQUAFIN®-RB400 or AQUAFIN®-2K/M-PLUS depending on the application.

Observe applicable safety data sheet!

Explanations

Conformity / Declaration / Verification



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Impact classes and typical applications in accordance with DIN 18533

Impact classes and typical applications in accordance with 18533			
Water exposure class		Water exposure	Example applications
W1-E		Ground moisture and non-pressurised water	• Capillary-bound water and water transported by capillary force even against gravity
	W1.1-E	Ground moisture and non-pressurised water for floor slabs and walls in direct ground	• Highly permeable subsoil • Highly permeable back-filling of the building pit • Minimum 50 cm above the design water level
	W1.2-E	Ground moisture and non-pressurised water for floor slabs and walls in direct ground with drainage	• Water-logging in poorly permeable subsoil is avoided through drainage • Minimum 50 cm above the design water level
W2-E		Pressure water	• Water pressing in from the outside can act as groundwater, flood water or backwater.
	W2.1-E	Moderate influence from pressure water ≤3 m immersion depth	• Backwater / flood water up to 3 m
	W2.2-E	High exposure to pressing water > 3 m immersion depth	• Backwater / flood water over 3 m
W3-E		non-pressurised water on earth-covered ceilings	• Precipitation water that seeps through the earth fill to the waterproofing and must be drained off there
W4-E		Splash water and ground moisture at the wall base and capillary water in and under walls	• Splash and seepage water affect the plinth surfaces, floor slabs and foundations • Water can rise in capillary action in and under walls • With double-shell masonry work, rainwater running off can seep into the space between the shells

Impact classes for container in accordance with DIN 18535

Impact classes for containers in accordance with DIN 18535 The water exposure class of a container depends on the filling level.	
Water exposure class	Filling level
W1-B	≤ 5m
W2-B	≤ 10m
W3-B	> 10m