



Technical Data Sheet

AQUAFIN®-1K

Waterproofing slurry

Art.-No. 2 04248

Properties:

AQUAFIN-1K is a rigid hardening, cement based waterproofing material.
AQUAFIN-1K consists of quartz sand, portland cement and additives. It does not contain any materials, which may cause any negative effects on reinforcement or concrete.
AQUAFIN-1K hardens to a rigid impervious layer. If subsequent cracking of the surface is possible, use AQUAFIN-2K.

Areas of application:

Waterproofing on concrete, masonry and plaster, for interior and exterior use, in the following areas of application:

Civil engineering:	earth covered constructions, sewage works, water tanks, swimming pools, heating pipes, pits etc.
Building construction:	cellars
Water construction:	retaining walls, pools, tunnels, sluices
Older building constructions:	not protected against posterior moisture and soaking water

Typical Properties:

Basis:	sand/cement, polymer improved
Density of the mixed mortar:	1.85 kg/l
Mixing ratio:	25 kg AQUAFIN-1K to 6.7 l tap water or 6 kg AQUAFIN-1K to 1.6 l tap water
Mixing time:	3 minutes
Pot life:	60 minutes

Substrate/Application temperature:

min. approx. +5° C to max. approx. +35° C. Lower temperatures extend, higher temperatures reduce curing times.

Technical Properties:

Adhesion strength:	0.5 N/mm ² (ASTM D 4541:2002)
Shore 'D':	D/66/1 (ASTM D 2240:05)
Compressive strength:	16.8 N/mm ² at 28 d (ASTM C 579)
Rapid chloride permeability:	23% reduction (ASTM-C 1202.97)
Initial surface absorption:	Nil (BS 1881 Part 208:96)

Surface preparation:

The surface must be clean, sound and fine pored. It must be free from grease, dust, pockets, cracks and ridges. AQUAFIN-2K/M is suitable for smooth concrete, screed, mastic asphalt, plaster, gypsum board and masonry. Coarsely pored surfaces like gutter blocks or precast concrete blocks have to be grouted with cement mortar, ASOCRET-FS or AQUAFIN-1K. Use suitable methods to prepare the substrate dependent on its condition such as e.g. brushing, vacuuming, grinding, milling, shotblasting and water jetting.

Details:

- Concave moulding, ledging corner: Form between masonry and foundation a concave moulding of 4 cm length with pre-blended mortar ASOCRET-RN or cement-based mortar and ASOPLAST-MZ additive.
- Existing cracks can be sealed with AQUAFIN-2K/M by embedding the ASO-Joint-Tape-2000 into the first layer.
- For moving cracks and construction joints use ASO-Joint-Tape-2000-S.

AQUAFIN[®]-1K

Product preparation:

AQUAFIN-1K is supplied in powder form. Mix on site with clean water in a clean container to a workable consistency that can be sprayed or brushed. The surface should be pre-treated in the necessary way. Application must be ensured in several coats at a consumption of 1 - 2 kg/m² per coat. Protect fresh AQUAFIN-1K coats against direct sun, draft air, rain and frost.

Estimating & Supply:

Packaging:

Available in 6 kg and 25 kg bags

Consumption/Thickness of Layer:

Type of load 1:

earth moisture: 3.5 kg/m², app. 2.0 mm

Type of load 2:

ground water: 3.5 kg/m², app. 2.0 mm.

Type of load 3:

ground- and backwater: 4.5 kg/m², app. 2.5 mm

Exposure*): to rain after 3 hrs foot traffic after 1 day

to pressure water after 7 days

*) at 20° C and 60% relative humidity.

- To increase pot life/working time at higher temperature store material in a cool environment above +5° C and only expose to warm temperature shortly before mixing. Additionally use of cold water can also increase pot life/working time, if water addition is necessary.

Cleaning & Equipment Maintenance:

Unhardened AQUAFIN-1K can be removed from tools and equipment with water. Once cured, material is difficult to remove.

Storage & Shelf Life:

12 months when stored under dry conditions in original unopened packs. Use opened packs immediately.

Important advice:

AQUAFIN-1K contains cement and reacts alkaline with moisture. Therefore:

- protect skin and eyes
- please keep out of reach of children
- in case of eye or skin irritation wash thoroughly with clean cool water
- wear safety gloves
- in case of eye contact seek immediately medical treatment.