



Technical Data Sheet

AQUAFIN®-LATEX

Art.-No. 2 02300

Bonding Emulsion – Additive for Screeds and Mortars – Protection for new concrete

Description:

AQUAFIN-LATEX is a high concentrate bonding agent, free from acetate and softening agents, used for creating polymer modified mortars and screeds. The addition of AQUAFIN-LATEX improves workability and enhances the physical properties of the mortars and screeds.

Primary Uses:

AQUAFIN-LATEX can be used in multiple applications, including the following:

- As an additive for creating levelling & patching mortars
- As a bonding agent in shotcrete
- As a bonding agent for mortars, plasters and lime & cement paints
- As jointing material for masonry

Advantages:

Through the addition of AQUAFIN-LATEX the following characteristics are achieved:

- Improved chemical resistance of cement mortars
- Prevents premature drying out of green concrete
- Improved bonding, flexibility and crack resistance of plaster mortars
- Decreased water permeability
- Increased freeze/thaw resistance

Typical Properties:

Basis:	Polymer emulsion based on styrene-butadiene copolymer
Specific gravity:	approx. 1.05 kg /l
Colour:	white

Surface Preparation:

The area to be treated must:

- Be dust free, dry, sound, load-bearing and with good grip.
- Be free from separating and adhesion inhibiting materials such as dust, laitance, grease and similar.

Dependent upon the condition of the substrate to be treated suitable methods for preparation should be adopted such as e.g. Planing, scabbling, grit-blasting, shot-blasting.

All substrates must be evenly wetted until surface is fully saturated (avoid formation of puddles, absorptive substrates may require multiple wettings).

Product Preparation:

Do not apply at temperatures below +5 °C.

Use only fresh binding agents and clean washed additives with good grain distribution for the production of plastic mortars and screeds.

When adding to a dry mix, always pre-mix the dry mixture, then add the AQUAFIN-LATEX-Water solution and mix for 2 minutes. In general, wet in wet application is recommended. For thick coatings apply in multiple layers, gradually building-up to desired thickness.

Bonding Slurry:

In case of plastering on difficult surfaces, sealing plasters, sealing slurries, patch mortars, levelling mortar, floor coverings, between old and new concrete the following is to be regarded:

Gauging solution (AQUAFIN-LATEX:water):

- 1:1.5 up to 1:4 mixing ratio
- a) Shotcrete bonding slurry: Produce mortar which is then gunned into a layer thickness of 4 - 5 mm. Further applications for rendering according to manufacturers instructions.
- b) Other bonding slurries: Produce a brushable slurry. Brush this thoroughly into the substrate. Further amounts of mortar or concrete should immediately be spread wet in wet.

NOTE: Do not use pure AQUAFIN-LATEX-water solution as a bonding agent because quick drying out can produce a separating film.

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Levelling- and patching mortar:

Gauging solution (AQUAFIN-LATEX:water):

- 1:3 for coatings below 10 mm
- 1:5 for coatings over 10 mm
- 2:1 for higher chemical resistance (e.g. against urea, ammonia and diluted inorganic bases)

Apply stiff-plastic mortar on the well dampened surface. For heavy duty surface areas and very smooth surfaces first apply as a bonding agent (see above).

Floor coverings, wear-resistant surfaces in water construction and substrates:

Gauging solution (AQUAFIN-LATEX:water):

- 1:1.5 up to 1:2.5 for surfaces affected by high loading capacity
- 1:2 up to 1:4 for normal loading capacity with mixing ratio of

Apply the earth-moist mortar in layers of 15 - 30 mm, wet in wet, according to certified rules of technique. Make sure it is thoroughly compacted troweled off. Take into account possible shrinkage and placement of construction joints!

Plasters:

a) Standard lime cement plasters:

Gauging solution (AQUAFIN-LATEX:water):

- 1:2.5 up to 1:5.5

b) Plastering of insulation boards:

Gauging solution (AQUAFIN-LATEX:water):

- 1:2.5

AQUAFIN-LATEX is added to the plaster in those areas where better bonding, higher flexibility, reduced shrinkage crack-formation and reduced water permeability is desired.

Smooth finish and levelling of fair-faced concrete:

Gauging solution (AQUAFIN-LATEX:water):

- 1:4 up to 1:7

First apply bonding slurry and work into surface with a brush. Then immediately apply grouting mortar (wet-in-wet) with trowel or rubber squeegee, pulling smooth with a trowel.

Mortars:

Gauging solution (AQUAFIN-LATEX:water):

- 1:4 up to 1:7

For the bridging of construction joints between concrete construction elements mix mortar with gauging solution to a stiff-plastic consistency. Apply directly prior to concreting with a layer thickness of up to 5 cm. If used, secure formworks well. This construction joint is to be thoroughly covered with concrete and compacted as usual.

Bonding, jointing and concave moulding mortars:

a) For rigid joints in concrete and masonry construction

Gauging solution (AQUAFIN-LATEX:water):

- 1:2.5 up to 1:5

Produce mortar to a pasty consistency and fill into joint, removing excess with a trowel, squeegee, or similar.

b) Bonding of insulation and light construction boards:

Gauging solution (AQUAFIN-LATEX:water):

- 1:2.5

Apply plastic mortar with trowel to areas where boards will be fixed. Press boards into mortar, applying light pressure.

Addition to lime and cement paints:

Gauging solution (AQUAFIN-LATEX:water):

- 1:1.5

Add gauging solution to lime and cement paints to achieve better bonding and smear resistance as well as improved protection against weathering.

Curing & Protection:

Plaster finishes, floor coverings, patch and levelling mortar coverings are to be protected against the influences of rapid drying caused by wind and sun, using a plastic foil or using similar means of keeping the surface moist for 5 days following the application.

Protection of green concrete:

After dilution (1 part AQUAFIN-LATEX – 2,5 parts water) the material is applied with suitable spray equipment or brush. The handling and further application starts as

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soon as the curing process has begun and the surface is free of water.

Estimating & Supply:

Consumption: depends on the areas of application
Packaging: 1 kg, 10 kg, 25 kg, 180 kg, 1.000 kg

Storage & Shelf Life:

Minimum of 12 months when stored in unopened original packaging and protected from freezing and frost conditions.

Important advice:

- To avoid air entrainment AQUAFIN-LATEX mortars are to be mixed intensively, however, no longer than 1 - 2 minutes.
- Pure AQUAFIN-LATEX coats (without cement sand addition) are not suitable as a bonding layer, as a separating film may be formed in advance.
- AQUAFIN-LATEX gauging solutions which are diluted more than 1:7 (AQUAFIN-LATEX:water) offer only a minimum of plastics to the mortar, which is not hardly improve the mortar properties.
- Do not use AQUAFIN-LATEX mortar at temperatures below +5° C.
- AQUAFIN-LATEX mortar is not resistant against steady contact with fuel and organic solvents (use ASODUR- or INDUCRET-mortar). When using AQUAFIN-LATEX adhere to all rules and regulations, instructions for use on standard cement mortars. The substrate is to be cleaned and thoroughly moistened.
- Use clean sand with suitable grain size.
- For application in several layers always apply wet-in-wet. Protect against rapid drying out.
- Protect against wind and extreme temperatures.