PRODUCT DATA SHEET

Screed additive to reduces the amount of water

UZIN AS 51 Express

Additiv for normed cementitious screeds according to DIN 18 560-1 to reduce the water required and shorten the setting time of cementitious screeds

Applications:

Highly effective screed additive for reducing the setting time of cementitious screeds. Also decreases the amount of water required for mixing and the tendency of detrimental bleeding. Improves the installation properties, increases the flexural and compressive strengths as well as reducing crack formation in the cured screed. For interior and exterior use.

Suitable for:

- Cementitious bonded screeds
- Cementitious screeds on separating membrane or insulation
- Floating screeds
- Underfloor heating systems
- Cementitious top-coats (garages, shops)

GEV-EMICODE EC 1 PLUS very low emission

Product benefits / features:

Composition: redispersible polymers and additives.

- Reduces the amount of water up to 25 %
- Shortens the setting time
- Reduces tension and cracks
- Reduces shrinkage
- High plastifying effect
- Increased strength
- Heat after 5 days
- No remoistening till a relative humidity of 90 %.
- Ready for foot traffic after 24 hours*
- Addition as powder
- EMICODE EC 1 PLUS / very low emission***

*** tested with defined cements

Technical specifications:

Packaging:	Plastic bucket with a suitable measuring cup
Pack size:	10 kg
Shell life:	min. 12 months
Colour:	White-yellowish
Dosing:	max. 0.25 % (weight of cement)
Working temperature:	min. 5 °C
Hazard characteristics:	None
Strength with 50 kg of cement	min. C25-F5 (see Application)
Water/cement value:	max. 0.5
Working time:	90 – 120 min.*
Ready for covering*:	after 12 – 14 days**

* At 20 °C and 65 % relative humidity.

** For screed thicknesses up to 5 cm and 7 cm with underfloor heating.

ballister

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UZIN AS 51 Express

Substrate

Bonded screed:
Depending on condition, brush, abrade, grind or shot-blast the substrate, remove loose material and thoroughly vacuum the surface. Dampen the concrete several times. Brush the slurry onto the pale damp or properly with UZIN PE 360 PLUS primed concrete using a hard broom. Apply the screed mortar immediately "wet in wet".

Screed on separating membrane or insulation:
Install insulating materials with adequate dynamic rigidity and that lie flat. Ensure that covering of heating pipes as well as the provision of foam expansion strip, bay-joints and movement joints are carried out professionally.

Application:

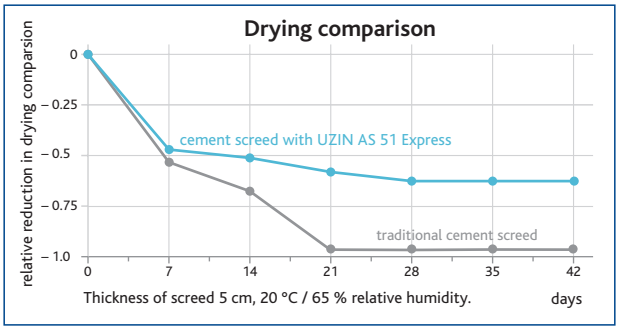
Before using please stir well. Measure UZIN AS 51 Express in the specified amount directly into the screed pump. The addition of the necessary amount of water depends on the screed sand's moisture. The amount of water should be set so that light plastic mortar consistency is achieved.

For a mixing-ratio of 1 : 6 of cement to sand, the recommended addition for achieving faster setting is 190 ml (125 g) UZIN AS 51 Express per pump filling (cement CEM I 32.5 R or CEM I 42.5 N, screed sand 0/8 mm, screen line A/B). The mixing time is at least 2 minutes per filling. The screed needs to smoothed with a machine to achieve high surface strength.

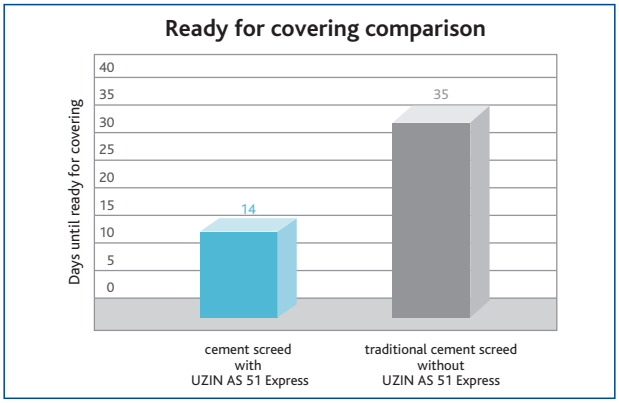
Mixing recommendation per pump filling

MV	cement	UZIN AS 51 Express
1 : 5	62.5 kg	max. 0.25 % (240 ml / 156 g)
1 : 6	50 kg	max. 0.25 % (190 ml / 125 g)

Practical Notes:



Ready for covering:



* At 20 °C and 65 % relative humidity.

Important notes:

- Shelf life minimum 12 months in original packaging when stored in relatively cool conditions. Protect from frost.
- Can be used in conditions from 5 °C – 30 °C.
- UZIN AS 51 Express is to be used undiluted. The mixing ratios recommended always refer to the powder.
- Freshly installed screeds should be protected at least 24 hours from being walked on and 7 days from loads being applied to them (at 20 °C / 65 % relative humidity).
- Do not mix with other cement additives.
- The rooms shall be aired out (intermittent full ventilation 3 – 5 times a day, min. 10 minutes) in a suitable manner to carry off excess moisture. Avoid drafts as much as possible.
- Climatic conditions of 20 °C and 65 % relative humidity constitute the best prerequisites for rapid drying.
- Reduces the amount of water up to 25 % (depending on different parameter, e.g. the consistency of installation, the screed sand moisture, etc.)
- The readiness for covering is determined according to the BEB Bulletin or DIN 18 560.
- The following standards and bulletins represent supporting information and are recommended for special attention:
  – DIN 18 560 "Screeds in the building industry"
  – DIN 18 353 "Working with screeds"
  – DIN EN 13 813 "Screeds material and floor screeds"
  – Interface coordination with heated floor constructions
  – BEB Bulletin "CM Measurement"

Protection of the Workplace and the Environment:

Screed additive. Requires no special protection or precautions in general use. Use of barrier cream is recommended. During mixing wear a suitable dustmask. The notes on occupational and environmental protection in the product information of the other products used must be observed.

EMICODE EC 1 PLUS – "very low emission". Within the scope of current knowledge, gives off no emissions of formaldehyde, hazardous materials or volatile organic compounds (VOC). When fully dried, has a neutral odour and presents no physiological or ecological risk.

Basic prerequisites for best possible indoor air quality following floor covering work are conformity to standards of the working conditions, as well as thoroughly dry substrate, primer and smoothing compound.

Disposal:

Where possible, collect product residues and re-use. Do not allow dispersal into drains, sewers or ground. Empty plastic containers are recyclable. Containers with residue, as well as the collected product residue, are classed as Special Waste.

The above information is based on our experience and careful investigations. The variety of associated materials and different construction and working conditions cannot be individually checked or influenced by us. The quality of your work depends, therefore, on your own professional judgement and product usage. If in doubt, conduct a small test or obtain technical advice. Observe the installation recommendations of the covering manufacturer. The publication of this Product Data Sheet invalidates all previous Product Information. The respective updated version of this datasheet can be found on our Homepage under www.uzin.com.