

Powerscreed 953

Hardening accelerator for cement and anhydrite screeds

Product Properties

- Liquid
- Accelerates hardening
- Allows a high water-reduction
- Shortens the drying time
- Good workability of the screed

Areas of Application

- Screeds up to EN 13813-CT-C35-F6 and EN 13813-CT-C25-F4
- Heating screeds
- Early coverable and trafficable screeds with good mechanical properties
- For interior screeds

Application Notes

To allow an exact dosage, the accelerator must be added directly to the pump-mixture and not to the water-barrel. The possible water reduction should be utilized to achieve an optimal effectiveness. The inherent moisture of the additives must also be taken into consideration.

Screed drying process

The drying process is influenced by the thickness of the screed and the ambient moisture. Walls and floors which are not completely dried, high air-humidity and dew-point changes, as well as the lack of soil-sealing, and plaster- and paint-work, etc. can lead to a moisture exchange. This means, that already dry screeds re-absorb moisture from their surroundings. This equilibrium moisture delays or prevents the attainment of the desired residual moisture in the screed and therefore lengthens the time until the screed can be covered.

To aid the drying process, a sufficient supply of fresh air, e.g. by opening a window, should be provided. However, drafts must be avoided. Covering the screed surface by any means (films, planks, etc.) extends the drying time.

Application

Powerscreed 953 has usually little influence on the screed's processing time. The effectiveness of this additive depends on the origin and composition of the aggregate, as well as on the type of cement. The optimal dosage can be determined in preliminary tests with the corresponding aggregate mate-

rials and cements. In the course of these suitability tests the technical properties and the workability of the screed mortar can be tested. When changing the screed-formulation, the constancy of the screed mortar's properties when using Powerscreed 953, must be determined in preliminary tests.

Dosage

If the general conditions are observed, a residual moistness of less than 2 mass -% will be achieved after approx. 12-14 days, at a dosage of 0.5 litres of Powerscreed 953 per 50 kg of cement (1 % of the cement-weight). If a faster drying time is desired, a dosage increase to 1 litre of accelerator per 50 kg of cement (2 % of the cement-weight) will shorten the drying time to approx. 7 days in most cases.

Heating screeds

For heating screeds the existing floor heating must be either heated up to approx. 20 °C before the screed is applied the environment conditions for 15 °C room temperature have to be respected. Any further heating can be started 7 to 10 days after the applications. The flow temperature is increased daily by 5 °C up to the maximum. After three days at the maximum flow temperature is reached and decreased again step by step.

Further Information

Please refer to the data sheet "General Application Advice for Powerscreed" and to the safety data sheet.



Technical Data for Powerscreed 953

Characteristic	Unit	Value	Comments
Density	g/cm ³	approx. 1.19	
Recommended Dosage for Cement Screed	% l	approx. 1.0 - 2.0 approx. 0.5 - 1.0	of the cement weight, equals per 50 kg of cement
Examples of recipes*: EN 13813-CT-C25-F4	kg kg l	50 280 approx. 13 - 15 approx. 1.0	Cement (CEM I 32.5 R) (2 bags) Screed sand 0/8 Water (depends on humidity of the sand) Powerscreed 953
EN 13813-CT-C35-F6	kg kg l	62.5 280 approx. 14 - 16 aprox. 1.3	Cement (CEM I 32.5 R) (2.5 bags) Screed sand 0/8 Water (depends on humidity of the sand) Powerscreed 953

*The mentioned quantities of these examples are appropriate for a 200 l screed mixer. They should be seen as recommendations and base on laboratory tests and experiences. With disadvantageous composition of aggregates the strength can be decreased. In single cases we recommend preliminary tests in compliance with EN 13813. The declared drying time refers to cement-screeds of approximately 50 mm thickness. Thicker cross-sections and disadvantageous ambient conditions can extend the drying time. After the filling and closing of the mixer a minimal mixing time of 60 second should be ensured.

Product Characteristics for Powerscreed 953

Internal Quality Control	DIN EN ISO 9001
Colour	black
Consistency	liquid
Form of Delivery	35 kg canister 230 kg barrel 1,000 kg container
Storage	Can be stored for at least 12 months. Keep frost-free!
Disposal	For the sake of our environment please empty the packs completely!

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 05/14. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.