

Emckrete 100 F

Hydraulically setting high-performance grouting mortar



PRODUCT PROPERTIES

- Ready to use - simply mix with water
- High early and final strengths
- High adhesive tensile strength on properly treated substrates
- Impermeable to water
- High resistance to frost and de-icing salts in acc. to CDF test method (weathering 141 g/m², 28 FTC)
- Shrink compensated
- Highly flowable
- Chloride free
- Pumpable
- Non-flammable according to EN 13501 - class A1
- Registered with DGNB (Code: 5294E6)
- Certified as grouting mortar according to VeBMR guideline of DAfStb
- Certified as anchoring product acc. to EN 1504-6

AREAS OF APPLICATION

- Grouting of rigid joints, e.g. between precast elements, between precast and in-situ concrete
- Void filling
- Grouting and under grouting of precision machines
- Grouting and under grouting of power station equipment and machine foundations, which are subjected to high vibrations, for ex. turbines, generators, compressors and engines
- Grouting and under grouting of anchor screws, fixing and base plates, steel and concrete supports
- Grouting and under grouting of bridge bearings and crane rails
- Grouting of steel constructions, fastening bolts and steel elements in concrete
- Under grouting of wind power plants
- Suitable for exposure classes acc. to DIN 1045-2/EN 206-1: XO, XC 1-4, XD 1-3, XS 1-3, XF 1-4, XA 1-3
- Suitable for moisture classes due to alkali-silica reaction: WO, WF, WA

APPLICATION ADVICE

Substrate Preparation: Please take into consideration the advices written on the “General Application Advice for hydraulically setting grouting concrete and grouting mortar”.

Mixing: Please take into consideration the advices written on the “General Application Advice for hydraulically setting grouting concrete and grouting mortar”.

Mounting: Please take into consideration the advices written on the “General Application Advice for hydraulically setting grouting concrete and grouting mortar”.

Note: Emckrete 100 F has excellent adhesive properties when applied over properly treated substrates. The use of bonding agents, particularly the ones based on reactive polymers, is not allowed.

Emckrete 100 F is pumpable, when using the appropriate equipment. Please ask for our advice.

Curing: Please take into consideration the advices written on the “General Application Advice for hydraulically setting grouting concrete and grouting mortar”.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments	
Working time	minutes	approx. 60	at 5° C	
		approx. 45	at 20° C	
		approx. 30	at 35° C	
Application conditions	°C	≥ 5 ≤ 35	air and substrate temperatures	
Consumption	kg/m ²	2.05	factory-dried mortar	
Maximum grain size	mm	≤ 3	grading curve from 0 mm	
Compressive strength (storage in air)	N/mm ²			
		24 h	45	
		7 d	100	
		28 d	110	
Flexural strength (storage in air)	N/mm ²			
		24 h	8.1	determined using the prism (mm) 40 x 40 x 160
		7 d	11.5	determined using the prism (mm) 40 x 40 x 160
		28 d	14	determined using the prism (mm) 40 x 40 x 160
Wet bulk density	kg/dm ³	2.3		
Grouting height	mm	≥ 10		
		≤ 75	VeBMR-RiLi	
Water addition	l	3.25	per 25 kg	
	%	13		
Slump flow class		f2	650 - 740 mm	
Swelling dimension	%			
		24 h	approx. 1.1	per VeBMR-RiLi of the DAfStB
Shrinkage class		SKVM I		
Early strength class		A	fc, cube, 24 h ≥ 40 N/mm ²	
Compressive strength class	N/mm ²	C90/105	DAfStb guideline for grouts	
E-modulus (dynamic)	N/mm ²	37,000	after 28 days	
Delivery form	25 kg bag; 1 pallet (40 bags @ 25 kg)			
Self-monitoring	EN ISO 9001			
Storage	Can be stored in cool and dry conditions for at least 12 months in original unopened packs.			
Packaging disposal	Make sure single-use containers are completely empty.			

Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : ZP1

Note: The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2300018585]