



# 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/m<sup>2</sup>, 28 FTC)
- Shrink compensated
- Highly flowable
- Chloride free
- Pumpable
- Non-flammable according to EN 13501 - class A1
- 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 Notes

#### 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 Data for Emckrete 100 F

Characteristic	Unit	Value*	Comments
Grain size	mm	0 - 3	
Grouting thickness	mm	10 - 75	acc. to VeBMR guideline of DAfStB
Added water	l %	3.25 13	per 25 kg bag
Flowability class		f2	≥ 650 - ≤ 740 mm
Swelling	%	approx. 1.1	after 24 h acc. to VeBMR guideline
Shrinkage class		SKVM I	according to VeBMR guideline of DAfStB
Dyn. modulus of elasticity	N/mm <sup>2</sup>	37,000	after 28 days
Flexural/Compr. strength Air chamber (Prism 40x40x160 mm)	N/mm <sup>2</sup>	8.1 / 45.0 11.5 / 100.0 14.0 / 110.0	after 24 hours after 7 days after 28 days
Early strength class		A	≥ 40 N/mm <sup>2</sup> after 24 hours
Compressive strength class	N/mm <sup>2</sup>	C90/105	according to VeBMR guideline of DAfStB
Workability time	Minutes	60/45/30	at + 5 °C/+ 20 °C/+ 35 °C
Processing conditions	°C	≥ +5 - ≤ +35	Air and substrate temperature
Coverage	kg/dm <sup>3</sup>	2.05	
Wet gross density	kg/dm <sup>3</sup>	2.3	

## Product characteristics for Emckrete 100 F

Internal production monitoring	DIN EN ISO 9001
Form	Powder
Storage	Can be stored for at least 12 months in original closed packs under dry and frost-free conditions.
Form of Delivery	25 kg bag; 1 pallet (40 x 25 kg bags)
Disposal	To protect our environment please empty the packs completely.

\* All technical values were determined in laboratory, at a temperature of 20 °C and 65 % relative humidity.

### Safety advice

Please take notice of the safety information and advice given on the packaging labels, Safety information Sheets and General Application Advice. GISCODE: ZP1

**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 05/19. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technical-ly revised new edition is issued, this edition becomes invalid.