

# Emckrete 60 F

Hydraulically setting grouting mortar



## PRODUCT PROPERTIES

- Ready to use - simply mix with water
- Highly flowable, high final strengths
- Swellable, shrink compensated
- High adhesive tensile strength on properly treated concrete surfaces
- Pumpable, chloride free acc. to EN 934-1
- Water impermeable according to EN 12390-8
- Very high resistance to frost and de-icing salts acc. to CDF test (weathering 510 g/m<sup>2</sup>, 56 FTC)
- Non-flammable according to EN 13501- class A1
- Registered with DGNB (Code: T24SS6)
- Certified as a grouting mortar according to DAfStb guideline "Production and use of cement-based grouting concrete and mortar"
- Certified as an anchoring product according to EN 1504-6

## AREAS OF APPLICATION

- Grouting of precision machinery, machine foundations, bridge bearings, crane rails, turbines, engines, steel-constructions
- Grouting of fastening bolts, steel elements in concrete, rigid joints between pre cast elements or between pre cast elements and in-situ concrete
- Suitable according to EN 206 for exposure classes XO, XC 1-4; XD 1-3; XS 1-3; XA 1-3 and XF 1-4
- Exposed to alkali silica reaction for moisture classes WO, WF, WA

## APPLICATION ADVICE

**Substrate Preparation:** Please refer to the data sheet "General Application Advice for hydraulically cured grouting concrete and grouting mortars".

**Mixing:** Please refer to the data sheet "General Application Advice for hydraulically cured grouting concrete and grouting mortars".

**Mounting:** Please refer to the data sheet "Application Advice for hydraulically cured grouting concrete and grouting mortars".

**Note:** Emckrete 60 F has excellent adhesive properties on well prepared substrates. The use of bonding agents, especially reactive polymer-based ones, is not permissible. Emckrete 60 F is pumpable using suitable equipment. Please ask for our technical assistance.

**Curing:** Please refer to the data sheet "Application Advice for hydraulically cured grouting concrete and grouting mortars".

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments	
Working time	minutes	approx. 60	at 5° C	
		approx. 90	at 20° C	
		approx. 75	at 35° C	
Application conditions	°C	> 5 < 35	air, substrate and material temperatures	
Consumption	kg/dm <sup>3</sup>	2.05		
Maximum grain size	mm	3	grading curve from 0 mm	
Compressive strength (storage in air)	N/mm <sup>2</sup>			
		24 h	36	
		7 d	83	
		28 d	93	
Flexural strength (storage in air)	N/mm <sup>2</sup>			
		24 h	6.5	determined using the prism (mm) 40 x 40 x 160
		7 d	6.7	determined using the prism (mm) 40 x 40 x 160
		28 d	8.8	determined using the prism (mm) 40 x 40 x 160
Resistance to de-icing salts	g/m <sup>2</sup>	510	weathering, 56 FTW per CDF	
Wet bulk density	kg/dm <sup>3</sup>	2.3		
Grouting height		≥ 10		
		≤ 75		
Water addition	l	3 - 3.25		
Slump flow class		f1	550 - 640 mm	
Swelling dimension	%	> 0.1		
Shrinkage class		SKVM II	$\epsilon_{s,m,91} \leq 1.2 \text{ ‰}$	
Early strength class		B	$\geq 25 \text{ N/mm}^2 < 40 \text{ N/mm}^2$	
Compressive strength class	N/mm <sup>2</sup>	C60/75		
E-modulus (dynamic)	N/mm <sup>2</sup>	35,000		

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

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.
Form	pulverous

### 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. [2300019088]