

MC-DUR 1077 FG

Transparent, two-component epoxy resin binder for casting and grouting mortars



PRODUCT PROPERTIES

- Unfilled epoxy resin with special creep- and levelling properties for manufacturing grouting mortars
- Especially good heat/shape stability for cold-curing epoxy resins
- Excellent levelling properties
- Ready-formulated casting- and grouting mortar
- Low heat-development during curing, even for larger application volumes
- Good resistance against numerous chemicals, including oils and greases

AREAS OF APPLICATION

- In combination with the MC-Special graining FG for manufacturing casting- and grouting mortars for application on machine foundations, mill foundations, crane tracks etc.
- REACH-assessed exposure scenarios: periodical water-contact, periodical inhalation, application

APPLICATION ADVICE

Substrate Preparation: See leaflets "General Application Advice": "Industrial Flooring - Substrate and Substrate Preparation" and "Reactive Resins".

Mixing: MC-DUR 1077 FG consists of a base and a hardener component delivered in pre-packed quantities. Before application the base and the hardener must be mixed together thoroughly, using a slowly rotating mixer. After mixing the compound must be refilled into another clean container and briefly mixed again. The ready-to-use grouting mortar is made by mixing MC-DUR 1077 FG (resin) and MC-Spezial-sand FG (special-grain). The components are supplied in pre-packed quantities. One bucket of resin is mixed with two bags aggregate. The aggregate is put into a forced mixer, then the mixed resin is added. Afterwards it is mixed until homogenous. Collection of air, e.g. due to exceedingly high revolutions, must be avoided.

Application: Application of the finished grouting mortar depends on local factors. In any case it is necessary to provide sufficiently sized ventilation holes.

General Information: Coverage, application times, resistance to foot traffic and time until full resistance are determined by temperature and site properties and condition. See also leaflet "General Application Advice - Reactive Resins".

Exposure to chemicals and UV-light may cause colour changes, which usually do not affect the properties and usability of the coating. Mechanically and chemically exposed surfaces are subject to wear and tear. Regular check-ups and continuous maintenance are advised.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Resilient after (mechanically)	hours	24	at 20° C and 50 % rel. humidity
Resilient after (mechanically full)	days	7	at 20° C and 50 % rel. humidity
Flexural strength	N/mm ²		at 20° C and 50 % rel. humidity
7 d		approx. 31	
28 d		approx. 34	
Density	g/cm ³	approx. 1.1 approx. 2.1	pure binding agent Grouting mortar
Compressive strength	N/mm ²		at 20° C and 50 % rel. humidity
24 h		approx. 111	
28 d		approx. 124	
Modulus of elasticity	N/mm ²	approx. 11,000	
Linear coefficient of thermal expansion	αT	approx. 3.0 · 10 ⁻⁶ K	
Mixing ratio ¹⁾	Packing Unit	1 : 2	resin : aggregate
	mass fractions	4 : 1	base component : hardener component
		1 : 5.75	resin : aggregate
Temperature	°C	50	maximum
Application conditions	°C	≥ 10 ≤ 30	air, substrate and material temperatures
	%	≤ 85	rel. humidity
	K	3	above dew point
Working time	minutes	45	at 20° C and 50 % rel. humidity
Consumption	kg/m ² /mm	2.1	

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

1) aggregate is MC-Spezialkörnung FG

Equipment cleaning agent	MC-Reinigungsmittel U
Delivery form	8.7 kg packs (MC-DUR 1077 FG) and 25 kg bags (MC-special aggregates FG)
Storage	Can be stored in cool (below 20°C) and dry conditions for 24 months in original unopened packs. Protect from frost.
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 : RE30

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. [2300018180]