

# MC-CarboSolid 1000

Pigmented, two-component epoxy resin  
levelling mortar for structural strengthening



## PRODUCT PROPERTIES

- Two-component mortar based on epoxy resin (PC)
- High mechanical strength
- Stable
- Rapid strength development even at low temperatures ( $\geq 8\text{ °C}$ )
- Tested as levelling mortar for the MC-CarbonFiber system
- General approval by the building authorities no. Z-36.12-90 and Z-36.12-85

## AREAS OF APPLICATION

- Levelling of voids and blowholes in horizontal, vertical and overhead concrete surfaces
- Levelling of concrete surfaces for an evenness  $\leq 5\text{ mm}$
- Approved levelling mortar for structural strengthening with the MC-CarbonFiber system
- REACH-assessed exposure scenarios: periodical water-contact, long-term inhalation, application

## APPLICATION ADVICE

**System Products:** The levelling mortar MC-CarboSolid 1000 is only used with the bonding coat MC-CarboSolid 1000 BC.

**Substrate Preparation/Mixing:** See leaflets "General Application Advice": "Substrate and Substrate Preparation" and "Reactive Resins". See respective general approval by the building authorities.

**Bonding Coat:** MC-CarboSolid 1000 BC, applied using a brush or roller. See technical data sheet "MC-CarboSolid 1000 BC".

**Application:** MC-CarboSolid 1000 is applied fresh-in-fresh onto the previously applied bonding coat, using a trowel, scraper or similar tools. Application must be carried out that an optimum compaction of the mortar is accomplished while, at the same time, maintaining an even surface (roughness  $\leq 5\text{ mm}$ ). In case of higher layer thicknesses on vertical or overhead surfaces the existing temperatures and the surface roughness must be observed.

**General information:** High temperatures shorten and low temperatures extend all indicated times. As a general rule of thumb a temperature change of  $10\text{ °C}$  either halves or doubles the indicated pot life respectively.

**Safety Advice:** Please take notice of the safety information and advice given on the packaging labels and safety information sheets.

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Density (mixture)	kg/dm <sup>3</sup>	approx. 1.8	
Mixing ratio	p.b.w.	82 : 18	base component : hardener component
Working time	minutes	approx. 60	at 10° C
		approx. 30	at 20 °C
		approx. 15	at 30 °C
Application conditions <sup>1)</sup>	°C	≥ 8 ≤ 30	air and substrate temperatures
	%	≤ 85	rel. humidity
	K	3	above dew point
Consumption	kg/m <sup>2</sup>	approx. 1.8	per mm layer thickness
Viscosity			pasty
Coefficient of expansion	K <sup>-1</sup>	2.7 x 10 <sup>-5</sup>	
Flexural strength	N/mm <sup>2</sup>		
		24 h	30
		7 d	33
E-modulus	N/mm <sup>2</sup>	approx. 9,200	
Compressive strength	N/mm <sup>2</sup>		
		24 h	62
		7 d	74
Tensile strength (concrete)	N/mm <sup>2</sup>		after 24 hours
		≥ 3	Punch 50 mm Ø
Layer thickness (range) <sup>2)</sup>	mm	2	minimum layer thickness
		10	maximum

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

1) For optimum workability, do not store too cold (recommendation: > 15° C to < 20° C)

2) For thicker layers, apply the material in several layers.

Colour	grey
Equipment cleaning agent	MC-Reinigungsmittel U
Delivery form	10 kg packs
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 : 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. [2400020846]