

# MC-FLEX 2099

Ductile, chemical resistant polyurethane-based coating



## PRODUCT PROPERTIES

- Solvent-free, pigmented, trafficable, polyurethane-based coating
- Self-levelling
- High chemical resistance and abrasion resistance
- Resistant to foot traffic, anti-skid surfaces are achieved by strewing with quartz sand

## AREAS OF APPLICATION

- Floor coating for substrates with increased requirements to static crack-bridging
- Protection of concrete- and steel surfaces against chemical and mechanical impact
- REACH-assessed exposure scenarios: long-term water-contact, long-term inhalation, application

## APPLICATION ADVICE

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

### Cement-bound substrates

**Priming:** Use MC-DUR 1200 VK, please refer to technical data sheet MC-DUR 1200 VK. In case the primer is the contact layer to the top coat of MC-FLEX 2099 the fresh primer must be strewn with oven-dried quartz sand (0.2 - 0.6 mm), coverage 1 - 2 kg/ m<sup>2</sup>.

**Scratch Coat:** Scratch- and levelling coat consisting of MC-DUR 1200 VK and oven-dried quartz sand (0.1 - 0.3 mm). See technical data sheet MC-DUR 1200 VK. In case the scratch coat is the contact layer to the top coat of MC-FLEX 2099 the fresh scratch coat must be strewn with oven-dried quartz sand (0.2 - 0.6 mm), coverage 1-2 kg/ m<sup>2</sup>.

**Steel Substrates:** Steel substrates must be prepared in such a manner that the substrate is free from loose particles or any other contaminants or corroding agents. The steel has to be de-rusted up to a standard Sa 2 1/2 according to DIN EN ISO 12944-4. The resulting surface roughness must comply to the roughness class "medium (G)" or "medium (S)" according to ISO 8503-1.

**Priming:** Corrosion protection primer with Colusal VS, see technical data sheet Colusal VS. Colusal VS is applied two work steps and afterwards strewn fresh with oven-dried quartz sand (0.1 - 0.3 mm), coverage 1 - 2 kg/ m<sup>2</sup>.

**Mixing:** MC-FLEX 2099 consists of base and hardener component, supplied in pre-packed quantities. Prior to application both components are mixed thoroughly using slowly rotating mixers. After mixing the material is poured into a clean container and mixed again (re-potting).

**Application:** MC-FLEX 2099 is poured onto the substrate, spread using a pin screed or trowel and afterwards deaerated with a spiked roller. For floor surfaces with a slope > 1 % MC-Stellmittel TX 19 is added.

**General Information:** Coverage, application time, resistance to foot traffic and time until full resistance are determined by temperature and object properties and condition. See also leaflet "General Application Advice - Reactive Resins". Concerning the batch colour consistency, please note the general information on the 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
Mixing ratio	mass fractions	2 : 1	base component : hardener component
Density	g/cm <sup>3</sup>	approx. 1.11	
Viscosity	mPa · s	approx. 3,500	
Working time	minutes	approx. 20	
Application conditions	°C	≥ 6 ≤ 30	air, substrate and material temperatures
	%	≤ 85	rel. humidity
	K	3	above dew point
Consumption	kg/m <sup>2</sup>	1.1	per mm layer thickness
Resilient after (full)	days	5	
Accessible after	hours	approx. 12	

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

Equipment Cleaning Agent	MC-Verdünnung PU
Colour Shade	grey, other colours on request
Delivery Form	Pair of containers @ 9 kg
Storage	Can be stored in cool (below 20°C) and dry conditions for 12 months in original unopened packs. Protect from frost.
Packaging Disposal	Make sure single-use containers are completely empty. Ensure compliance with our information leaflet "Return of Emptied Transportation and Sale Packaging". We will be glad to send you this on request.
EU Regulation 2004/42 (Decopaint Directive)	RL2004/42/EG All/j (500 g/l) ≤ 500 g/l VOC

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : PU40

**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. [2100005533]