

# MC-FLEX 2099 FG

Viscoplastic polyurethane, suitable for food contact



## PRODUCT PROPERTIES

- Solvent free, pigmented coating, based on polyurethane
- High chemical and abrasion resistance
- Thixotropic

## AREAS OF APPLICATION

- Wall and floor coating for substrates with increased demands on crack bridging
- Protection of concrete and steel surfaces against chemical and mechanical attacks
- Suitable for the application in the food industry according to EU regulation No 10/2011
- REACH-assessed exposure scenarios: permanent water-contact, permanent inhalation, application

## APPLICATION ADVICE

**Substrate Preparation / Mixing:** See leaflets "Industrial Flooring - Substrate and Substrate Preparation" and "Reactive Resins".

### Cement substrates

**Primer:** MC-DUR 1200 VK. Also see datasheet MC-DUR 1200 VK. In case the primer is in direct contact to the top coat of MC-FLEX 2099 FG, the fresh primer is strewn with 1 to 2 kg/ m<sup>2</sup> of oven dried quartz sand (grain size 0.2 - 0.6 mm).

**Scratch coat:** The scratch coat is made of MC-DUR 1200 VK and oven dried quartz sand (grain size 0,1 - 0,3 mm). Also see data sheet MC-DUR 1200 VK. In case the scratch coat is in direct contact to the top coat of MC-FLEX 2099 FG, the fresh primer is strewn with 1 to 2 kg/ m<sup>2</sup> of oven dried quartz sand (grain size 0.2 - 0.6 mm).

**Binder layer:** After curing, the layer underneath MC-FLEX 2099 FG is again primed with a thin layer of MC-DUR 1200 VK and in fresh state strewn with 1.5 to 2 kg of MC-Spezialsand WR. Also see data sheet of „MC-Spezialsand WR“.

### Steel substrates

Steel substrates to be coated have to be prepared according to Sa 2 ½ acc. DIN EN ISO 12944-4. The roughness of the surface needs to fulfill the requirements „medium (G)“ or „medium (S)“ according to ISO 8503-1.

**Primer:** Corrosion protection primer Colusal SP. Also see datasheet Colusal SP. Colusal SP applied in two layers of which the second is applied with lowest amount possible and strewn with 1.5 to 2 kg of MC-Spezialsand WR. Also see data sheet of „MC-Spezialsand WR“.

**Mixing:** MC-FLEX 2099 FG consists of the base and hardener, which are delivered in quantity matched container. Before application both components are to be mixed properly, using slow stirring mixers. After mixing, the coating material must be poured into a clean bucket and mixed again briefly.

**Application:** MC-FLEX 2099 FG is applied using a trowel or roller. The mixture is thixotropic up to a maximum consumption of 400 g/m<sup>2</sup> and layer. When applying in horizontal areas, the coating is to be spike rolled within 20 min.

**General information:** Coverage, application time, resistance to foot traffic and time until fill 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	100 : 28	base component : hardener component
Density	g/cm <sup>3</sup>	approx. 1.24	
Viscosity	mPa s	approx. 12,500	at 20° C and 50 % rel. humidity
Working time	minutes	approx. 20	at 20° C and 50 % rel. humidity
Application conditions	°C	≥ 5 ≤ 30	Temperatura del aire, soporte y material
	%	≤ 80	rel. humidity
	K	3	above dew point
Consumption	g/m <sup>2</sup>	approx. 1,500	horizontal
		approx. - 400	vertically trowelled / rolled each working day
Resilient after (full)	days	5	at 20° C and 50 % rel. humidity
Accessible after	hours	approx. 16	at 20° C and 50 % rel. humidity

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

Equipment cleaning agent	MC-Verdünnung PU
Colour	grey
Delivery form	10 kg packs
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.
EU Regulation 2004/42 (Decopaint Directive)	RL2004/42/EG AIII/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. [2400020559]