

# MC-DUR LF 680

Heat-resistant special-polyurethane resin



## PRODUCT PROPERTIES

- Two-component, red-transparent, special-polyurethane resin
- Fast-curing
- Curing almost not related to temperatures and moisture influence
- Short waiting time between two work steps

## AREAS OF APPLICATION

- Priming, sealing or scratch coating of bridge decks and car parks according to TL/TP- BEL-EP
- Application even under bad weather conditions
- Suitable for the application under bituminous felt as part of the MC-KKS-B system
- REACH-assessed exposure scenarios : application, permanent inhalation, periodical water contact

## APPLICATION ADVICE

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

**Application:** See ZTV-ING, part 7.

**Primer (no longer included in ZTV-ING, part 7-1 (10/2021)):** The prepared concrete surface is to be primed by flooding in at least one work-step until saturation (approx. 400 - 500 g/m<sup>2</sup>). The material is then blended with a lambskin roller. Accumulations of material must be avoided. The still fresh primer is sprinkled immediately with fire-dried quartz sand (0.2 - 0.7 mm) at a consumption of approx. 500 - 800 g/m<sup>2</sup>. Non-incorporated quartz sand must be removed after the primer has cured.

**Sealing according to ZTV-ING, part 7-1 (10/2021):** The sealer is applied in two layers. For this purpose, a first coat of MC-DUR LF 680 with a consumption of at least 400 g/m<sup>2</sup> is applied by flooding, distributed with rubber squeegees and re-rolled immediately by means of fur rollers. The still fresh first coat of MC-DUR LF 680 is immediately sprinkled immediately with an excess of fire-dried quartz sand (0.7-1.2 mm). After sufficient curing of the first coat, unbound quartz sand must be removed. In the second working operation, a further layer of MC-DUR LF 680 with a consumption of at least 600 g/m<sup>2</sup> is applied and distributed in such a way that accumulations of material are avoided, the scattering is uniformly wetted and a closed and uniformly rough surface is obtained. This surface is not scattered. Larger depressions must be levelled in accordance with ZTV-ING, Part 7.

**Scratch Coat according to ZTV-ING, Part 7-1 (10/2021):** The scratch coat consists of a primer with MC-DUR LF 680 (consumption min. 400 g/m<sup>2</sup>) in a uniformly thin layer and a subsequently applied reaction resin mortar consisting of MC-DUR LF 680 and fire-dried quartz sand (for grading curve, see execution instructions, mixing ratio 1:3 - 1:4 by weight). The consumption quantity is approx. 2.0 kg/m<sup>2</sup>/mm finished reaction resin mortar mixture of resin and sand (mixing ratio 1:3), depending on the existing roughness depth. If fresh-on-fresh work is carried out, the thin primer of MC-DUR LF 680 must not be sanded. If the reaction resin mortar is applied to a cured primer, this fresh primer must be sanded immediately. The reaction resin mortar is scraped off over the tops of the concrete surface. The fresh reaction resin mortar is sprinkled immediately with fire-dried quartz sand (0.7-1.2 mm) in full in excess. Un-embedded quartz sand is to be removed after sufficient curing of the scratch coat. Subsequently, a layer of MC-DUR LF 680 with a consumption of at least 600 g/m<sup>2</sup> is applied to this surface and distributed in such a way that accumulations of material are avoided and the scattering is evenly wetted. This surface is not scattered. Larger depressions are to be levelled according to ZTV-ING, part 7.

**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".

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 : 66	base component : hardener component
Viscosity	mPa·s	approx. 700	at 20° C and 50 % rel. humidity
Density	g/cm <sup>3</sup>	approx. 1.1	at 20° C and 50 % rel. humidity
Working time	minutes	approx. 20	at 20° C and 50 % rel. humidity
Application conditions <sup>1)</sup>	°C	≥ 2 ≤ 35	air and substrate temperatures
Consumption	kg/m <sup>2</sup>		
Primer		0.4 - 0.5	
Sealing		approx. 1	
Scratch and levelling coat		approx. 0.6	sealing
Consumption	kg/m <sup>2</sup> /mm		
Scratch coat		approx. 2	Mixing ratio 1:3
Overworkable after	hours	approx. 1 - 2	at 20° C and 50 % rel. humidity
		approx. 2.5	at 2°C and 50% rel. humidity

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

1) Avoid standing water on the concrete surface and pores saturated with water.

Equipment cleaning agent	MC-Reinigungsmittel U
Colour	red-transparent
Delivery form	30 kg packs
Storage	Can be stored in cool (below 20°C) and dry conditions for 18 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 All/j (500 g/l) ≤ 500 g/l VOC
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. [2300019135]