

MC-DUR 1800

Highly chemical-resistant epoxy resin coating

Product Properties

- Two-component, pigmented epoxy resin coating for use in industrial areas
- Increased mechanical and chemical resistance
- Product is available in smooth finish, anti-skid finish and conductive finish
- Also available as a combined anti-skid finish with conductive properties

Areas of Application

- Environmental protection system / bund lining system in compliance with environmental legislation
- Coating of mineral substrates against highly aggressive chemicals
- For use in industrial areas or similar
- REACH-assessed exposure scenarios: periodical inhalation, application

Application

Substrate Preparation/Mixing

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

Priming

Use MC-DUR 1200 VK, please refer to technical data sheet "MC-DUR 1200 VK".

Scratch coat

MC-DUR 1200 VK and oven-dried quartz-sand (0.1 - 0.3 mm). Please refer to technical data sheet "MC-DUR 1200 VK".

Application

MC-DUR 1800 is applied 12 to 24 hours after application of the scratch coat using a steel float, adjustable screeding tools or rubber squeegee. In areas not governed by environmental legislation MC-DUR 1800 FF (fibre-free) can be used. For layers thicker of more than 1 mm MC-DUR 1800 FF may be filled with oven-dried quartz-sand (0.1 - 0.3 mm) in a mixing ratio of 1 : 0.5 p.b.w. After application the freshly laid areas are deaerated cross-wise with a spiked roller. To obtain higher surface friction finishes the coat is immediately strewn in excess (approx. 5 - 6 kg/m²) with oven-dried quartz-sand (e. g. 0.2 - 0.7 mm or coarser). After curing all loose sand is removed and the top coat applied. The top coat is applied with a rubber squeegee.

Coating, conductive

12 to 24 hours after application of the scratch coat

the earthing terminals are to be set in a maximum distance of 15 meters. Then the electrically conductive intermediate layer MC-DUR GLW is applied (see technical data sheet "MC-DUR GLW"). The coating with MC-DUR 1800 must not be thicker than 2 mm (max. 2.7 kg/m²).

Application on vertical areas

MC-DUR 1800 is added with approx. 3 - 5 % by weight MC-Stellmittel TX 19 (thixotropic grade) (MC-Thixotropic Agent TX 19).

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.

Temperatures below 10 °C combined with relative humidity above 80 % during the curing phase may cause color and gloss differences in the coating surface, as well an increased susceptibility to dirt.



Technical Data for MC-DUR 1800

Characteristic	Unit	Value	Comments
Mixing ratio	p. b. w.	5 : 1	base : hardener
Density	g/cm ³	approx. 1.48	-
Viscosity	mPa·s	5,000	at 20 °C and 50 % relative humidity
Pot life	minutes	approx. 20	at 20 °C and 50 % relative humidity
Resistant to foot traffic after...	hours	approx. 12	at 20 °C and 50 % relative humidity
Time until full resistance	days	7	at 20 °C and 50 % relative humidity
Compressive strength	N/mm ²	approx. 80	after 7 days
Bending tensile strength	N/mm ²	approx. 40	after 7 days
Application conditions	°C	≥ 10 - ≤ 30	air, material and substrate temperature
	%	≤ 85	relative humidity
	K	3	above dew point
Coverage (MC-DUR 1800)	kg/m ²	min. 2.0 max. 3.0	1.4 mm layer thickness to 2.0 mm layer thickness
(MC-DUR 1800 TX)	kg/m ²	approx. 0.6	per work step

Product Characteristics for MC-DUR 1800

	MC-DUR 1800	MC-DUR 1800 TX
EU-regulation 2004/42 (Decopaint standard)	RL2004/42/EG All/j (550/500 g/l) < 500 g/l VOC	RL2004/42/EG All/j (550/500 g/l) < 500 g/l VOC
Standard Colour	MC-grey; approx. RAL 7032; further colours on request	
Delivery	12 kg and 30 kg packs	
Cleaning agent	MC-Reinigungsmittel U	
Storage	Can be stored in cool (below 20 °C) and dry conditions for at least one year in original unopened packs. Protect from frost!	
Disposal	Packs must be emptied completely.	

Safety Advice

Please take notice of the safety information and advice given on the packaging labels and safety information sheets and please take notice of the chapter "Safety Measures for Handling Coating Materials and Reactive Resins". GISCODE: RE1

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 10/15. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.