

MC-DUR 1800

Highly chemical-resistant, conductive 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

- Coating of mineral substrates against highly aggressive chemicals
- For use in industrial areas or similar
- REACH-assessed exposure scenarios: periodical inhalation, application

APPLICATION ADVICE

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 and needs to be de-aered intensely immediately after application using a spike roll. For layers thicker of more than 1 mm MC-DUR 1800 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. 0.3 - 0.8 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 con-ductive 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).

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. Intensively dyed substances may leave stains at the surface of a coating, if not removed promptly (e.g. coffee, tea, red wine etc.). We therefore recommend immediate removal. After completion of the reaction, depending on the ambient conditions, MC-DUR 1800 can form a thin, sticky carbamate film on the surface, which can be easily removed with slightly acidic cleaning agents.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Mixing ratio	mass fractions	5 : 1	base component : hardener component
Density	g/cm ³	approx. 1.43	
Viscosity	mPa s	approx. 4,000	at 20° C and 50 % rel. humidity
Working time	minutes	approx. 20	at 20° C and 50 % rel. humidity
Flexural strength	N/mm ²	approx. 40	
Compressive strength	N/mm ²	approx. 80	
Accessible after	hours	approx. 12	at 20° C and 50 % rel. humidity
Resilient after (full)	days	7	at 20° C and 50 % rel. humidity
Application conditions	°C	≤ 10 ≤ 30	air, substrate and material temperatures
	%	≤ 85	rel. humidity
	K	3	above dew point
Consumption	kg/m ²	approx. 2 - 3	1.4-2,0 mm layer thickness

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

Equipment cleaning agent	MC-Reinigungsmittel U
Colour	MC-grey, approx. RAL 7032, other colours on request
Delivery form	12 or 30 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 All/j (550/500 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 : 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. [2300018200]