

MC-DUR 111 eco

Water-based, epoxy resin dispersion



PRODUCT PROPERTIES

- Water-based, two component epoxy resin
- semi-glossy
- Adheres to dry as well as slightly damp mineral-based surfaces (no visible moisture)
- Resistant to water exposure, diluted acids and alkaline solutions, as well as numerous organic chemicals (see Table of Chemical Resistance)
- Meets the criteria of AgBB 2018 for the use in inner areas
- Very low emission according to GEV-EMICODE, categorie EC1^{PLUS}R

AREAS OF APPLICATION

- Optically pleasing sealer for mineral-based substrates subject to mechanical and chemical stress
- For use in areas with light to moderate mechanical stress
- Tunnel coating according to ÖBV leaflet
- REACH-assessed exposure scenarios: long-term inhalation, application

APPLICATION ADVICE

Substrate Preparation / Mixing:

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

Primer: Mineral substrates are primed with MC-DUR 111 eco transparent or MC-DUR 1101. The material is evenly distributed with a rubber blade or short floor roller (see corresponding technical data sheet). The use of the transparent primer is particularly recommended for very dense substrates such as grouting compounds and wing-smoothed concrete or screeds, as well as in case of a following scratch coat. Suitable substrates can alternatively be primed with MC-DUR 111 eco, adding up to 5 % water.

Scratch coat: A scratch coat is made of MC-DUR 111 eco transparent or MC-DUR 1101 and oven-dried quartzsand (0.1 - 0.3 mm). Please refer to corresponding technical data sheet.

Application: After a waiting time of 12 - 48 hours MC-DUR 111 eco is applied crosswise and streak-free using a short-piled roller. Coverage rates must be observed. Usually two work steps are required to achieve an optimum colour design. The waiting time between the two work steps is min. 12 and max. 48 hours. The layers should be applied swiftly and without seams. The end of the application time cannot be determined by a higher viscosity of the material. Therefore MC-DUR 111 eco may not be used after its specified pot life. To ensure optimal drying a minimum surface- and air-temperature of 10 °C and a relative humidity of 85 % is permitted. The intervals between the individual work-steps should not exceed 48 hours (at a temperature of 20 °C).

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	17 : 10	base component : hardener component
Density	g/cm ³	approx. 1.35	
Viscosity	mPa · s	approx. 1,200	at 20° C and 50 % rel. humidity
Working time	minutes	approx. 30	at 20° C and 50 % rel. humidity
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 ¹⁾	kg/m ²	approx. 0.25 - 0.3	per operation

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

1) (layer thickness = approx. 100 µm at 250 g/m²)

Equipment cleaning agent	water
Colour	MC-grey, approx. RAL 7023, approx. RAL 7030, approx. RAL 7032, approx. RAL 7035, RAL 7040, other colours on request
Delivery form	10 kg and 20 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 (140 g/l) ≤ 140 g/l VOC

Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : RE10

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. [2500025771]