

MC-DUR 111 D

Water-based,
epoxy resin dispersion

Product Properties

- Water based, two component epoxy resin for use in industrial areas
- 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 Chemical Resistance Chart)
- Available as transparent impregnation, pigmented sealer and combined anti-skid finish
- Good abrasion resistance

Areas of Application

- Impregnation of mineral surfaces for dustproofing
- Optically pleasing sealer for mineral-based substrates subject to increase mechanical and chemical stress
- Oil- and Benzene-resistant sealer for car-parks, garages, department stores, car-wash plants and other inner areas
- For use in industrial areas or similar
- Colored coating of pre-cast elements
- REACH-assessed exposure scenarios: long term inhalation, application

Application

Substrate Preparation/ Mixing

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

Application as sealer

MC-DUR 111 D may be applied by brushes, rollers or airless spraying technique, water must not be added. Mineral-based substrates are primed with MC-DUR 111 D transparent and afterwards sealed with two layers of MC-DUR 111 D pigmented. 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 D 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 temperature of 25°C).

Application as anti-skid coating

MC-DUR 111 D is added approx. 3 weight-% MC Anti-Slip 50. It is applied with rubber squeegees and roll crosswise with short-piled lambskin rollers.

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 Data for MC-DUR 111 D

Characteristic	Unit	Value		Comments
		MC-DUR 111 D Transparent	MC-DUR 111 D Pigmented	
Mixing ratio	p.b.w.	3 : 1	4 : 1	base : hardener
Density	g/cm ³	approx. 1.070	approx. 1.300	-
Viscosity	mPa•s	approx. 400	approx. 2000	at 20°C and 50% relative humidity
Pot life	minutes	approx. 120	approx. 120	at 20°C and 50% relative humidity
Resistance to foot traffic after...	hours	approx. 16	approx. 16	at 20°C and 50% relative humidity
Time until full resistance	days	7	7	at 20°C and 50% relative humidity
Coverage	kg/m ²	0.200 - 0.250	0.250 - 0.300	per work step
Application conditions	°C	> 10 - < 30	> 10 - < 30	air, material and substrate temperature relative humidity above dew point
	%	< 85	< 85	
	K	> 3	> 3	
Layer thickness	µm	approx. 100	approx. 170	at 250 g/m ²

Product Characteristics for MC-DUR 111 D

	MC-DUR 111 D Transparent	MC-DUR 111 D Pigmented
Colour	Transparent	MC Grey, Mid Grey, Dark Grey; approx. to RAL-colours range; further colours on request.
Delivery	5 kg and 25 kg packs	5 kg and 25 kg packs
Cleaning agent	Water	Water
EU-regulation 2004/42 (Decopaint standard)	RL2004/42/EG All/j (140 g/l) ≤ 140 g/l VOC	RL2004/42/EG All/j (140 g/l) ≤ 140 g/l VOC
Storage	Can be stored in cool (> 5°C - < 25 °C) and dry conditions for at least 12 months in original unopened packs. Protect from frost!	
Disposal	In the interest of the environment, please empty all packs completely & in accordance with local regulations.	

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 leaflet "Safety Measures for Handling Coating Materials and Reactive Resins".

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 03/20. 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.