



# MC-DUR 1100 diffusion

## Satin-finished, two-component epoxy resin dispersion

### Product Properties

- Self-levelling, diffusible, water-based, satin-finished coating/sealer with high chemical and mechanical resistance
- For smooth and anti-skid coatings
- Coating with excellent cleaning properties

### Areas of Application

- Ground-connected, highly loaded areas, e.g. underground car parks
- For slightly damp substrates or backward moisture
- REACh-assessed exposure scenarios: long-term inhalation, application

### Application

#### Substrate Preparation/Mixing

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

#### Priming

The prepared substrate is primed with the solvent-free, transparent, two-component epoxy resin MC-DUR 1101. Please refer to our technical data sheet "MC-DUR 1101".

#### Scratch coat

After priming, pores and blow holes are closed with a scratch coat. This coat consists of MC-DUR 1101 mixed with oven-dried quartz-sand (grain size: 0.1 - 0.3 mm). Please refer to our technical data sheet "MC-DUR 1101".

#### Application

MC-DUR 1100 diffusion is applied with a steel float or a rubber-squeegee. The freshly laid area should then be deaerated cross-wise with a spiked roller. Water-based MC-DUR 1100 diffusion loses volume while curing.

To achieve anti-skid coatings MC-DUR 1100 diffusion is filled with oven-dried quartz sand (0.1 - 0.3 mm) with a mixing ratio up to 1 : 0,8 (p.b.w.). After application the fresh coating is strewn immediately in excess with oven-dried quartz sand of grain size 0.2 - 0.7 mm. After removing all loose sand, two

sealer coats of MC-DUR 1100 diffusion are applied on top of the scratch-coat. The top sealer is applied sharply across the grains using a rubber squeegee and rolled crosswise with a short-piled lambskin roller.

MC-DUR 1100 diffusion is applied in two work steps by roller if used as a sealer in horizontal or vertical areas.

The surface can be enhanced by MC-DUR 2095 M with a matt finish (see technical data sheet MC-DUR 2095 M). MC-DUR 2095 M is applied crosswise with a lambskin roller.

#### 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 1100 diffusion

| Characteristic  | Unit              | Value                                     | Comments  |
|---|-------------------|---|---|
| Mixing ratio  | p. b. w.          | 6 : 1                                     | base : hardener   |
| Density   | g/cm <sup>3</sup> | approx. 1.70                              | -   |
| Viscosity   | mPa·s             | approx. 1,200                             | at 20 °C and 50 % relative humidity   |
| Pot life  | minutes           | approx. 30                                | at 20 °C and 50 % relative humidity   |
| Resistant to foot traffic after...                                      | hours             | approx. 16                                | at 20 °C and 50 % relative humidity   |
| Time until full resistance  | days              | 7   | at 20 °C and 50 % relative humidity   |
| Resin (pure)  |                   |   |   |
| Compressive strength  | N/mm <sup>2</sup> | approx. 37                                | after 7 days  |
| Bending tensile strength  | N/mm <sup>2</sup> | approx. 5                                 | after 7 days  |
| Resin: aggregate p.b.w. quartz sand 0.1 - 0.3 mm (mixing ratio 1 : 0.5) |                   |   |   |
| Compressive strength  | N/mm <sup>2</sup> | approx. 38                                | after 7 days  |
| Flexural strength   | N/mm <sup>2</sup> | approx. 20                                | after 7 days  |
| Application conditions  | °C<br>%<br>K      | > 10 - < 30<br>< 85<br>3                  | air, substrate and material temperature<br>relative humidity<br>above dew point |
| Coverage  | kg/m <sup>2</sup> | approx. 0.4<br><br>2.0 - 2.5<br>0.4 - 0.5 | sealer (per work step, two work steps are necessary)<br>coating<br>top coat     |

## Product Characteristics for MC-DUR 1100 diffusion

|  |  |
|--|--|
| Cleaning agent                             | water  |
| Colour                                     | MC-grey, approx. RAL 1001, RAL 7023, RAL 7030, RAL 7032;<br>further colours on request                                     |
| Delivery                                   | 10 and 30 kg packs   |
| Storage                                    | Can be stored in cool (below 20 °C) and dry conditions for at least 1 year in original unopened packs. Protect from frost! |
| Disposal                                   | Packs must be emptied completely.  |
| EU-regulation 2004/42 (Decopaint standard) | RL2004/42/EG All/j (140/140 g/l) max 19 g/l VOC  |

### 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 06/10. 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.