

# MC-DUR 1390 VK

**Low-viscosity, transparent, highly fillable universal epoxy resin**

## Product Properties

- Two-component, universal epoxy resin for use in industrial areas
- Good adhesion to mineral-based substrates
- Waterproof up to filling ratios of 1 : 10 (MC-Spezialkörnung SK 2)
- Self-levelling up to filling ratios of 1 : 3
- High mechanical and chemical resistance when filled with aggregates, even against static, rolling and grinding stress

## Areas of Application

- Priming of mineral-based substrates under coatings and screeds
- Binder for epoxy resin mortars, scratch coats
- Production of reactive resin mortars
- Rigid crack injection for dry-edged cracks, 1 - 2 mm in width
- REACh-assessed exposure scenarios: periodical water-contact, periodical inhalation, application

## Application

### Substrate Preparation/Mixing

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

### Application

If used as a primer MC-DUR 1390 VK is applied with a rubber squeegee and/or a roller. If it cannot be overcoated within 24 hours, the fresh primer must be strewn with oven-dried quartz-sand (grain size 0.1 - 0.3 mm). The exact coverage rate of a primer depends on the condition of the substrate (texture, temperature and porosity) and can be approximated by laying a sample area. Scratch coats, as well as self-levelling screeds made from MC-DUR 1390 VK /quartz-sand mixtures, are applied with steel floats, rubber squeegees, pin screeds or rubber trowels on primed surfaces. The scratch coat is made from MC-DUR 1390 VK and oven-dried quartz sand (grain size 0.1 - 0.3 mm) in a mixing ratio of 1 : 1 to 1 : 2 p.b.w.. The scratch coat must be overcoated within 24 hours, otherwise the fresh layer must also be strewn with oven-dried quartz sand (grain size 0.1 - 0.3 mm). Mortar screeds of 1 : 4 p.b.w. and more have to be applied on a fresh bond coat of 300 - 500 g/m<sup>2</sup> MC-DUR 1390 VK. To achieve watertightness highly filled mortars of up to 1 : 15 p. b. w. are additio-

nally coated with MC-DUR 1390 VK or another MC-DUR reactive polymer. Especially wear-resistant mortar coatings are obtained by adding oven-dried hard aggregates.

The possible degree of filling depends on the temperature, therefore it is advised to work with pre-heated aggregates at low temperatures.

### Application on vertical areas

For sloped or vertical areas 3 - 5 % MC-Stellmittel TX 19 is added to MC-DUR 1390 VK and the mixture is applied with a steel float.

### 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".

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 1390 VK

Characteristic	Unit	Value	Comments
Mixing ratio	p. b. w.	3 : 1	base : hardener
Density	g/cm <sup>3</sup>	approx. 1.08	-
Viscosity	mPa·s	approx. 750	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. 24	at 20 °C and 50 % relative humidity
Time until full resistance	days	7	at 20 °C and 50 % relative humidity
Compressive strengths resin : aggregate (MC-DUR 1390 VK : Spezialkörnung SK 1)			
Mixing ratio 1 : 4	N/mm <sup>2</sup>	approx. 51	after 7 days
Mixing ratio 1 : 7	N/mm <sup>2</sup>	approx. 56	after 7 days
Flexible strengths resin : aggregate (MC-DUR 1390 VK : Spezialkörnung SK 1)			
Mixing ratio 1 : 4	N/mm <sup>2</sup>	approx. 31	after 7 days
Mixing ratio 1 : 7	N/mm <sup>2</sup>	approx. 30	after 7 days
Application conditions	°C % K	≥ 8 - ≤ 30 ≤ 85 3	air, material and substrate temperature relative humidity above dew point
Coverage	kg/m <sup>2</sup> kg/m <sup>2</sup>	approx. 0.40 approx. 0.27	filling of 1 : 4 filling of 1 : 7

## Product Characteristics for MC-DUR 1390 VK

Cleaning agent	MC-Reinigungsmittel U
Colour	transparent
Delivery	10 and 30 kg packs
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.
EU-regulation 2004/42 (Decopaint standard)	RL2004/42/EG All/j (550/500 g/l) max 102 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 06/09. 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.