

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

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 ADVICE

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

Primer: Application of MC-DUR 1390 VK as a primer is carried out by means of rubber squeegee and/or roller. If it cannot be overcoated within 24 hours the fresh primer is to be strewn with oven-dried quartz-sand (0.1 - 0.3 mm).

Scratch coat: Scratch- and levelling coats of MC-DUR 1390 VK/quartz-sand are applied with steel floats, rubber squeegees and/or adjustable screeding tools onto the primer. The scratch- and levelling coat consists of MC-DUR 1390 VK and oven-dried quartz-sand (0.1 - 0.3 mm) mixed in a ratio of 1 : 1 p.b.w. If it cannot be overcoated within 24 hours the fresh scratch coat is to be strewn with oven-dried quartz-sand (0.1 - 0.3 mm).

Reaction resin mortar: The properties of MC-DUR 1390 VK depend on filling ratio and grading curve of the aggregates. Filling ratios of up to 1 : 3 p.b.w. are self-levelling while filling ratios of up to approx. 1 : 10 p.b.w.

(special aggregates SK 2) form a liquid-tight mortar if used appropriately. For mixing ratios of 1 : 4 onwards it must always be applied directly onto a bonding agent of MC-DUR 1390 VK (coverage approx. 300 - 500 g/m²). Highly filled mortars of up to approx. 1 : 15 p.b.w. still have very good compressive and flexural-tensile strengths but are additionally coated with MC-DUR 1200 or other MC-DUR resins to achieve sufficient liquid tightness.

Application on vertical areas: For sloped or vertical areas MC-DUR 1390 VK is added approx. 3 - 5 % by weight MC-Stellmittel TX 19 (MC-Thixotropic Agent TX 19).

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 VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Mixing ratio	mass fractions	3 : 1	base component : hardener component
Density	g/cm ³	1.1	
Viscosity	mPa s	850	at 20° C and 50 % rel. humidity
Working time	minutes		
10 kg container		approx. 20	at 20° C and 50 % rel. humidity
30 kg container		approx. 15	at 20° C and 50 % rel. humidity
Flexural strength	N/mm ²		
7 d		approx. 22	with special aggregate MC-Spezialkörnung SK 1 (mixing ratio 1:8)
Compressive strength	N/mm ²		
7 d		approx. 71	with special aggregate MC-Spezialkörnung SK 1 (mixing ratio 1:8)
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	%	≤ 85	rel. humidity
	°C	≥ 10 ≤ 30	air, substrate and material temperatures
	K	3	above dew point
Consumption	kg/m ²	approx. 0.3	primer
	kg/m ² /mm	approx. 0.4	degree of fill 1:4
		approx. 0.27	degree of fill 1:7

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

Equipment cleaning agent	MC-Reinigungsmittel U
Colour	transparent
Delivery form	10 and 30 kg packs
Storage	Can be stored in cool (below 20°C) and dry conditions for 24 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 Allj (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. [2300018198]