

# MC-DUR VS NR3

Epoxy resin sealer for protection of cooling tower structures



## PRODUCT PROPERTIES

- Two-component, solvent-containing epoxy resin sealer for protection of cooling tower structures
- High diffusion resistance against water vapour and pollutants
- Good resistance against diluted acids, leaches and salt solutions
- Application by brush, roller or spraying

## AREAS OF APPLICATION

- Sealer and coating for reinforced concrete and mineral-based substrates of cooling tower structures, even with flue gas inlet
- Long-term references and certified system according to VGB-guideline R 612 U,
- product is subject to regular external surveillance by a material testing institute
- 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". Project specific conditions must be observed for use at cooling tower structures. Concrete repair or levelling measures might be necessary before sealing to achieve the defined layer thicknesses. Please also see our specification for cooling towers and our leaflet "General Application Advice for Concrete Replacement Systems and Fine Fillers" for further information.

**Priming:** Mineral substrates are primed with MC-DUR 1277 WV, applied using a roller. See technical data sheet "MC-DUR 1277 WV". Fat, grease and standing water on the primed surface must be avoided.

**Application:** After a waiting period of min. 24 to max. 72 hours at 20° C the primed surface is sealed with MC-DUR VS NR3. Application by brush, roller or airless spraying. If applied by hand usually 2 work steps are required. For application on cooling towers please refer to our technical specifications. MC-DUR VS NR3 is not resistant to UV and yellowing. MC-DUR VS NR3 can be protected from yellowing by application of the UV-resistant MC-DUR 2103 M (see technical data sheet "MC-DUR 2103 M").

**General Information:** Coverage, application time, resistance to foot traffic and time until full resistance are determined by temperature and object 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	4 : 1	base component : hardener component
Density	g/cm <sup>3</sup>	approx. 1.28	
Viscosity	mPa · s	approx. 2,000	
Working time	minutes	120	
Overworkable after	hours	> 24 < 72	at 20° C and 50 % rel. humidity at 20° C and 50 % rel. humidity
Application conditions	°C	≥ 8 ≤ 30	air, substrate and material temperatures
	%	≤ 85	rel. humidity
	K	3	above dew point
Consumption <sup>1)</sup>	g/m <sup>2</sup>	approx. 300	
Resilient after (full)	days	7	
Dust-dry after	hours	approx. 4	

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

1) 145 µm dry layer thickness

Equipment cleaning agent	MC-Reinigungsmittel U
Colour	RAL 7023, RAL 7032, other colours on request
Delivery form	Pairs of 30 kg containers
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 All/j (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 : RE90

**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. [2400022542]