

# MC-Ballastbond 60

Rock adhesive bonding of ballast, split and loose rock



## PRODUCT PROPERTIES

- Low-viscosity epoxy-based duromer resin
- Short reaction time
- Durable rigid bonding
- Pressure-resistant
- Tensile strength
- Tough-elastic
- REACH exposure: water contact permanent, processing and application
- Environmental Product Declaration EPD

## AREAS OF APPLICATION

- Reinforcement of ballast bearing layers by glueing the rock to impair its drainage capacity
- Improving the positional stability of highly loaded ballast along railway tracks, e.g. B. at lane crossings, in curves, at shunts
- Protection of ballast shoulders during conversion work and track renewals
- Bonding and sealing of gravel and split surfaces to increase the load capacity, for color design or against plant growth

## APPLICATION ADVICE

**Preparatory measures:** Prior application, an investigation of the gravel surface must be carried out according to the state of the art and the rules of technology and a concept must be planned. The ballast to be bonded should be dry, clean and free of any separating components. A trial application is recommended.

**Mixing the components:** The components of MC-Ballastbond 60 should be mixed homogeneously with each other in the specified mixing ratio with slowly rotating stirring paddles. The mixing time is 1 minute.

Mixed reaction resin must be repotted in a clean empty container and mixed again before processing.

The pot life/working time of the mixed resin depends on the prevailing ambient temperature. The working time can be extended by cooling the resin components and the resin mixture.

**Application:** The application to the gravel surface is carried out with pump with sufficient delivery capacity. The resin mixture is sprayed evenly onto the rock surface with a lance. The spray jet must be a closed fan. The distance to the gravel surface should not be more than 20 cm. Avoid aerosols.

The spray nozzle (nozzle opening) must be adapted to the construction site conditions (resin temperature, spray width). The amount applied per m<sup>2</sup> is based on the specified penetration depth and must be determined on site. As a guide, 1-2 liters of adhesive per m<sup>2</sup> of gravel for a penetration depth of 10 cm apply.

If the surface temperature is < 8°C, if it is raining or if the gravel surface is wet, application must be stopped. The ingress of moisture to the resin components in opened containers must be effectively prevented (e.g. using a drying agent).

Ensure compliance with the information given in the specifications and the Safety Data Sheets.

**Equipment cleaning:** Within the working time, all solvent-resistant equipment can be cleaned with MC-Cleaner eco or thinner product MC-Verdünnung EP. Material that has reacted or set will need to be removed mechanically.

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

| Characteristic               | Unit               | Value           | Comments                             |
|------------------------------|--------------------|-----------------|--------------------------------------|
| Mixing ratio                 | mass fractions     | 3 : 1           | comp. A : comp. B                    |
|                              | parts by volume    | 2,66 : 1        | comp. A : comp. B                    |
| Glass transition temperature | °C                 | approx. 30      | EN ISO 11357-2                       |
| Working time                 | minutes            | approx. 10 - 15 |                                      |
| Ultimate elongation          | %                  | approx. 10      | DIN 53 455                           |
| Tensile strength             | N/mm <sup>2</sup>  |                 | DIN 53 455                           |
| 7 d                          |                    | approx. 17.5    |                                      |
| Density                      | kg/dm <sup>3</sup> |                 | EN ISO 2811-1                        |
|                              |                    | approx. 1.1     |                                      |
| Viscosity                    | mPa · s            | approx. 500     | EN ISO 3219                          |
| Compressive strength         | N/mm <sup>2</sup>  |                 | EN ISO 604                           |
| 7 d                          |                    | approx. 30      |                                      |
| Application conditions       | °C                 | 8 - 35          | substrate temperature (rock surface) |
|                              | K                  | 3               | above dew point                      |
|                              | %                  | ≤ 85            | rel. humidity                        |

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

|                          |  |  |  |
|--------------------------|--|--|--|
| equipment cleaning agent | MC-Verdünnung EP (thinner), under no circumstances should water or aqueous cleaning agents be used   |  |  |
| delivery form            | Container pairs with 10 kg and 30 kg contents  |  |  |
| colour shade             | transparent  |  |  |
| Storage                  | Can be stored in original sealed packages at temperatures between 10°C and 30°C in dry conditions for at least 24 months.  |  |  |
| packaging disposal       | Make sure single-use containers are completely empty. Ensure compliance with our information leaflet "Return of Emptied Transportation and Sale Packaging". We will be glad to send you this on request. |  |  |

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : RE55

**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. [2100004959]