

ombran MHP fine

Highly sulfate-resistant fine mortar for coating and reprofiling sewage structures



PRODUCT PROPERTIES

- Cement-bounded, polymer-modified, one-component, C3A-free binding agent
- Impermeable to water
- Can withstand heavy mechanical loads, fibre-reinforced
- Resistant to very severe sulphate attack
- Rapidly capable of being exposed to water
- Suitable as a coating system in public sewerage systems, durable down to pH ≥ 3.5

AREAS OF APPLICATION

- Coating of concrete and masonry manholes, sewers as well as reservoirs
- Re-profiling of breakouts and defects in manholes, sewers and reservoirs
- Surface levelling in masonry manholes
- Jointing of masonry and tiles / panels in waste water structures
- Forming of fillets
- REACH-assessed exposure scenarios: periodical inhalation, application, long-term water contact

APPLICATION ADVICE

Substrate Preparation: See the data sheet "General Application Advice for manhole and sewer repair-mortars".

Pre-wetting / Bonding Agent: See data sheet "General Application Advice for manhole and sewer repair mortars". ombran HB must be used as the bonding agent. The details of the technical data sheet of ombran HB must be observed. Alternatively, ombran MHP fine can be used to produce a bonding bridge by mixing it to a slurry consistency (approx. 21% water added to dry powder).

Mixing: The mineral re-profiling / coating consists of ready-mixed ombran MHP fine and water. Pour out the major part of the water, scatter the ready-mix mortar on it and mix to a uniform, lump-free consistency. The remaining water is used to adjust the consistency as necessary. Pug mill mixers and slow-running double stirrers are suitable for mixing the mortar. Mixing by hand and mixing of partial quantities is not allowed. The mixing time is between 2 and 3 minutes, depending on the amount of water added.

Mixing Ratio: About 3.8 to 4.1 litres of water are needed for a 25 kg bag of ombran MHP fine. Since ombran MHP fine is cement-bound, the amount of water needed may vary.

Application: ombran MHP fine must be applied "fresh-in-fresh" to the bonding agent using suitable tools (e.g. steel smoothing tool, trowel), compacted and abraded. Where a thick coating is required it may be necessary to apply multiple layers. For overcoating with reaction resin, please request a separate consultation.

Curing: During post-treatment, ombran MHP must be protected from excessive water loss for at least 72 hours (chem. curing agents e.g. MC-RIM PROTECT C, jute sacking, foil etc.). Particular attention must be given to the relevant effects of temperature and wind. If further layers of the material or subsequent coating systems are to be applied, the use of separating curing agents must be avoided or the surface must be intensively prepared by blasting to remove remaining curing layers.

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Mixing ratio	mass fractions		
As mortar		25 : 3.8 - 4.1	powder component : water
As bonding bridge		25 : 5.25	powder component : water
Working time	minutes	approx. 30	at 20 °C
Application conditions	°C	≥ 5 ≤ 30	air, substrate and material temperatures
Consumption ¹⁾	kg/m ² /mm	approx. 2	factory-dried mortar
Layer thickness	mm	≥ 4	per layer as coating mortar
		≤ 20	per layer as coating mortar
		approx. 30	maximum total layer thickness
Water resistant after	hours	approx. 3	at 20 °C
Maximum grain size	mm	approx. 1	
Fresh mortar bulk density	kg/dm ³	approx. 2.1	
Compressive strength	N/mm ²		
24 h		≥ 10	
7 d		≥ 35	
28 d		≥ 40	
Flexural strength	N/mm ²		
24 h		≥ 3	
7 d		≥ 5	
28 d		≥ 6	
E-modulus	N/mm ²	approx. 18,500	after 28 days

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

1) object specific

Equipment cleaning agent	water
Colour	Grey
Delivery form	25 kg bag
Storage	Can be stored in original sealed packages at temperatures between 5°C and 25°C in dry conditions for at least 12 months.
Packaging disposal	Make sure single-use containers are completely empty.

Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets. GISCODE : ZP1

Note: The information in this data sheet must be adapted by the installer, specialist planner, and/or building inspector to the respective construction project, intended use, and specific local conditions. Any non-standard local conditions must be taken into account, and application-specific conditions must be reviewed in advance by the planner/specifier. Deviations from the specified standard conditions 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. [2600030421]