

MC-Montan Grout 04

Hydration control additive for cementitious grouts and sprayed concrete.

PRODUCT PROPERTIES:

- Delays all types of cementitious hydration by creating a protective barrier around the cement particles.
- No loss of final concrete or grout quality.
- Re-activation of the hydration process by addition of set accelerators (standard or alkali-free).
- Improves stabilization.
- Reduction of viscosity & dispersing effect.
- Optimized pumpability.
- Almost neutral pH.

AREAS OF APPLICATION:

- All types of backfill grouts for tunnel boring machines TBM.
- Hydration Control Additive for component A @ accelerated A/B backfill grouts.
- Extended processing time, up to 3 days even in hot climates in case of being used in grouts.
- Tunneling and Mining.
- Temporary and permanent support.

APPLICATION ADVICE:

- **MC-Montan Grout 04** is an additive for improving the properties of hydraulic binder systems.
- Used in A/B Grouts, **MC-Montan Grout 04** can extend the processing time up to 7 days even > 30°C. Furthermore, it has a stabilizing and dispersing effect on the suspension of the component A and improves its pumpability.
- Wet and dry shotcrete mixes can be kept workable with **MC-Montan Grout 04** for up to 3 days. No cleaning of pipes and pumps is necessary during work interruptions.
- **Wet-mix sprayed concrete:** Premix aggregates with cement and 50% of the mixing water. Under continuous mixing, add **MC-Montan Grout 04** together with a high-performance superplasticizer - premixed with the rest of the mixing water or after all the water has been added. In the event of unexpected delays, a later addition of 0.2 – 1 % of **MC-Montan Grout 04** is possible to prolong storage time for a few hours.
- **Dry-mix sprayed concrete:** Premix aggregates with cement. Slowly add the necessary quantity of **MC-Montan Grout 04** under constant mixing and continue to mix for 2 to 5 minutes.
- The addition of **MC-Montan Grout 04** into the fresh mix is ideal. However, it can be added until up to 30 minutes after mixing of the dry-mix material without any problems.
- Generally, the dosage depends on the composition of the hydraulic binder and the desired open time.
- The dosage may range from 0.2 – 2% of cement weight.
- A dosage into the fresh mix is ideal – nevertheless **MC-Montan Grout 04** can also be added later on in case of necessity for prolonging the hydration control for a couple of hours.
- **MC-Montan Grout 04** can be used with all common dosing devices.
- Storage temperatures are from +1°C to +50°C. Once the product has been frozen, pls contact the MC Business Unit Tunnelling.
- The "MC-Business Unit Tunnelling" is available for individual recommendation and optimization of the application on site.
- MC always recommends performing trial batches in order to determine the exact hydration control under the specific local conditions.

TECHNICAL DATA:

Characteristic	Unit	Value	Comments
Density	kg/dm ³ (g/cm ³)	1.1 - 1.15	
Recommended dosage range	mass %	0.2 - 2	of the cement weight
Chloride content	%	~ 2.5	

PRODUCT CHARACTERISTICS:

Colour	Light brown.
Form	Liquid.
In-company production control	EN ISO 9001.
Storage	Can be stored in original sealed packages at temperatures between 1°C and 50°C in dry conditions for at least 12 months. Protect from direct sun radiation.
Delivery form	200 Kg Barrels; 1.000 Kg IBC.

Safety advice: Please observe the safety information and recommendations provided on the packaging label and the safety data sheet.

Note: The information provided here is based on our experience and correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual building projects, to the specific application and to non-standard local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. Given these preconditions we shall be liable for the accuracy of the information given as outlined in our sales and delivery terms and conditions. Recommendations by our employees that deviate from this information are only binding for us if they have been confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be adhered.

Edition **01/2025**. Some technical changes have been made to this print medium. Older editions are invalid and may not be used.