

MC-Shotcrete SH 100

Rapid hardening admixture for alkaline-free shotcrete.

PRODUCT PROPERTIES:

- High early strength development.
- Increase bonding strength to spray mortar and high wall and arch surfaces.
- Chloride free: Do not attack steel reinforcement.
- Admixture for powdered shotcrete, do not contain alkali, promote extremely early strength.
- Suitable for use as an accelerator in both the dry and wet spray processes.
- It is recommended to stir the product well before use.

AREAS OF APPLICATION:

- Support at the face: in tunneling; in mining; in gallery construction and in shaft construction.
- Shotcrete with high initial strength.
- Rock and slope stabilization.
- Lining stabilisation in underground works.
- High quality lining shotcrete.
- To form permanent gunite or shotcrete shells.

APPLICATION NOTES:

- **MC-Shotcrete SH 100** is suitable for use as an accelerator in both the dry and wet spray processes.
- **MC-Shotcrete SH 100** can be used for all kinds of portland cements as well as sulfate-resistant cements. When using sulfate resistant cements, strength development can be slower.
- The accelerator's effect depends on the cement content, type and age, the shotcrete and substrate temperatures, layer thicknesses and the spray process. The water / cement ratio in wet spraying and the quantity of mixing water in dry spraying are important criteria for the accelerating effects of **MC-Shotcrete SH 100**.
- The W/C should be not more than 0.45 for better adhesion. The lower W/C, the faster setting, the higher early strength and the more durable concrete.
- If thicker layers of shotcrete are to be applied, ensure that the temperature of the concrete is not lower than 15°C. Lower temperatures will require a higher dosage.
- Before using **MC-Shotcrete SH 100** the hoses of pump system must be cleaned thoroughly.
- Make sure the construction surface is clean and free of impurities.
- Must be stored in original sealed containers (absolutely not in iron containers), protected from direct sunlight and frost, at temperatures between +5°C and +30°C.
- **MC-Shotcrete SH 100** does not contain any hazardous substances. It is safe for use with standard precautions followed in the construction industry, such as use of hand gloves, safety goggles, etc.
- Avoid contact with foodstuffs and utensils. Avoid prolonged skin contact. In the event of contamination, wash thoroughly with water. If the eyes or mouth are affected, wash with clean water and obtain medical attention immediately.

TECHNICAL DATA:

Characteristic	Unit	Value	Comments
Density	g/cm ³	1.4 ± 0.08	
Recommended dosage	Litre	3 – 7	per 100 kg of binder
Max. Chloride content	%	per weight < 0.1	

PRODUCT CHARACTERISTICS:

Standard	Complies with ASTM C-1141
Consistency	Liquid
Expiry	8 months
Form of delivery	200 L drums 1000 L IBC tanks

Property specifications are based on laboratory tests and may vary in practical application. To determine the individual technical suitability, preliminary suitability tests should be carried out under the application conditions.

Color: Admixture's color can be changed due to the reaction between polymer component within admixture's composition with UV from sunlight. This phenomenon does not affect to admixture's quality in its shelf-life. We recommend users to store product into covered area to protect from direct sunlight in order to avoid mentioned changing.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition **11/23**. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.