

## DESCRIPTION

ShotRock 831 W is a high-performance alkaline-free setting accelerator for shotcrete mixes applied using the wet method. Changing the amount of ShotRock 831W allows to adjust the setting time, the rebound and thickness in one shotcrete layer pass.

## AREA OF APPLICATION DESCRIPTION

ShotRock 831 W should be used for applying concrete mix by wet shotcreting and concrete spraying.  
- shotcreting and concrete spraying in mining;

ShotRock 831 W is used in:  
- shotcreting and concrete spraying of cement, bricks, stone and other reinforced and non-reinforced surfaces;  
The use of ShotRock 831 W allows for significant reduction of the concrete mixture setting time, increasing the initial strength of concrete spraying, applying substantially thicker layer in a single pass.  
ShotRock 831 W is a high-performance alkaline-free setting accelerator for shotcrete mixes applied using the wet method. Changing the amount of ShotRock 831 W allows to adjust the setting time, the rebound and thickness in one shotcrete layer pass



## Key benefits

- Perfectly regulates setting time and accelerates hardening
- Reduces losses of shotcrete
- Alkaline-free

## Technical description

### PROPORTIONING

The average consumption of the ShotRock 831 W accelerator solution is determined during in the course of work and ranges from 1 to 10% of the cement weight. The amount of the dosage will depend on the setting time requirements, the rate of gaining early strength and thickness of concrete spraying layer, which must be applied in one pass. It should be noted that the setting time, early strength and, consequently, the dosage of the accelerator will be affected by the ambient temperature and gauged water, as well as the activity of utilized cement. A significant excess of the recommended dosage (>10%) may lead to lower final strength at the age of 28 days.

### TECHNOLOGY OF APPLICATION

The additive solution is put into the nozzle during shotcreting and concrete spraying works. The solution pumping requires a specially designed pump enabling the adjustment of additive consumption. It is important to ensure even introduction of the solution into the concrete. Additive pumping from the bottom of the packaging is recommended. Preliminary testing is recommended to check the setting time and daily strength of the types of cement that planned to use in this project in the future.

### SAFETY RULES

Avoid contact of ShotRock 831W with your mouth and eyes. In case of eye contact, rinse with large amount of clean water and, if necessary, seek medical advice. Use rubber gloves, protective goggles and a protective mask during operation. The ShotRock 831W additive is a moderately hazardous substance of the 3rd hazard class according to GOST 12.1.007. The additive does not form toxic compounds in the air and discharge water. The additive in the concrete mix does not change the toxicological and hygienic characteristics of the concrete. Hardened concrete with the additive does not emit toxic substances into the air.

### PARAMETERS

form	suspension
density at $t = 20^{\circ}\text{C}$	1.35-1.47 g/cm <sup>3</sup>
color	beige
acid-alkaline balance	pH 3

### PACKAGE TYPE AND SHELF LIFE

The additive as suspension solution is stored in special containers with sealing lids at a temperature not lower than  $0^{\circ}\text{C}$ . In case of accidental cooling (freezing), the additive will not lose its quality indicators. Before application, heat the additive to at least  $+20^{\circ}\text{C}$  and mix it again until homogeneous state.

Settling of sediment, subject to its effective suspending, does not reduce the technical efficiency of the additive. The additive should be re-mixed before the application to restore the initial state.

Shelf life in the manufacturer's packaging is 6 months from the date of manufacture.

The provided information is based on our experience and present knowledge. Due to numerous factors (characteristics of cement, aggregates) having effect on the final result, a selection of recipes is required. For more information please contact to a manufacturer's representative.

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