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**Shotcrete**

31 32 33

**Shotcrete Soil Slope  
Stabilization**

31 33 33

**Shotcrete Rock Slope  
Stabilization**

31 74 19

**Shotcrete Tunnel Lining**

**MASTER<sup>®</sup>**  
**» BUILDERS**  
**SOLUTIONS**

# MasterRoc<sup>®</sup> SA I 60

## Alkali-Free, Liquid High-Performance Set Accelerator for Sprayed Concrete

### Description

MasterRoc SA I 60 admixture is a high-performance alkali-free shotcrete accelerator for use in the wet-mix spraying process.

It is a liquid additive whose dosage can be varied to the desired setting and hardening times.

### Applications

Recommended for use in:

- Temporary and permanent rock support in tunnels
- Rock support in mining
- In poor ground conditions
- Slope stabilization
- Also suitable for acceleration of cementitious grouts, such as that used in TBM tunnel linings, cement grout injection and foam concrete backfill operations.
- Rock support
- Tunnels
- Wet shotcrete mixtures

### Features

- Ability to construct thick sprayed concrete linings via layered application during one construction sequence
- Good early strength development and continuous early-age strength development
- Good long-term strength and durability

### Benefits

- Easy handling, as well as easy and efficient addition to the sprayed concrete
- Little dust and, therefore, a better working environment and improved worker safety
- Reduces required handling precautions, improving economics

### Performance Characteristics

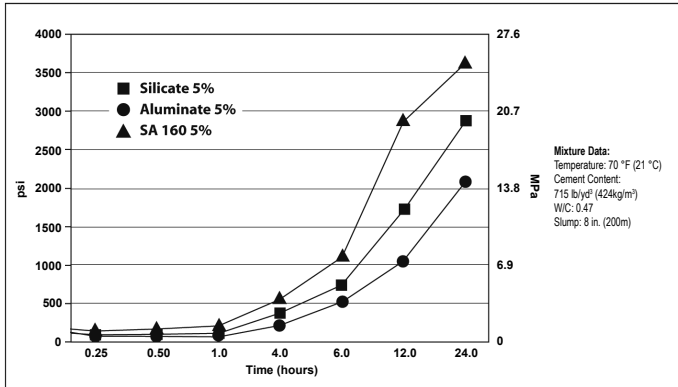
#### Technical Data

Form	Liquid
Color	Beige
Density	1.43 (nominal)
pH	2.5 to 3
Viscosity* (Haake)	450 ± 50 cP (mPa.s)
Thermal Stability	41 °F to 95 °F (5 °C to 35 °C)

\*At 68 °F (20 °C). Viscosity is dependent on the degree of product agitation and temperature.



## Compressive Strength



## Guidelines for Use

**Dosage:** The dosage of MasterRoc SA I 60 admixture depends on the temperature of concrete, air and substrate. Another important factor influencing the dosage is the reactivity of the cement. Depending on required setting time and early strength requirements, the consumption of MasterRoc SA I 60 admixture normally ranges between 4 to 8% of the binder weight. Overdosing (> 10%) may result in decreased final strength.

**Dispensing and Mixing:** MasterRoc SA I 60 admixture is added at the nozzle. MasterRoc SA I 60 admixture is a suspension and therefore not all types of dosing pumps will work properly. To secure a constant and adequate dosage is of crucial importance in order to achieve a good result.

### Works very well with:

- Membrane pumps
- Rotor-stator pumps
- Peristaltic pumps
- Gear pumps

### Do not use with:

- Piston pumps
- All pumps with ball and seat valves
- Pressure tanks

**Do not use a filter on the suction hose as this causes obstructions. Avoid suction directly off the bottom of the drum/container.**

**Application Procedure:** The substrate must be clean and free from loose particles.

**Cleaning of Dosing Pump:** Prior to the use of MasterRoc SA I 60 admixture, the dosing pump and accelerator hose must be thoroughly cleaned with plenty of water. Failure to do this promotes blockages in the dosing system. Make sure all operators involved in testing and application are informed.

## Product Notes

**Compatibility:** Do not mix MasterRoc SA I 60 admixture with other accelerators as this will cause immediate clogging of pumps and hoses.

## Storage and Handling

**Storage Temperature:** MasterRoc SA I 60 admixture should be stored at a temperature range of 41 to 95 °F (5 to 35 °C). It is recommended that your local sales representative be consulted prior to the use of any products that were frozen. Performance tests should always be carried out prior to use.

MasterRoc SA I 60 admixture must be kept in closed plastic drums/containers or closed tanks made of plastic/glass fiber. Do not store in steel containers as the pH can cause corrosion which might affect the performance of the product. Containers must be tightly closed every day to avoid contact with air which can cause a chemical reaction (skin building on top and lumps which cause problems with dosing pumps). **Stir MasterRoc SA I 60 admixture before use after prolonged storage. It can have a settlement not visually detectable.**

**Shelf Life:** MasterRoc SA I 60 admixture has a minimum shelf life of 6 months. Depending on storage conditions, the shelf life may be greater than stated. Please contact your local sales representative regarding suitability for use and dosage recommendations if the shelf life of MasterRoc SA I 60 admixture has been exceeded.

**Safety:** Avoid eye and skin contact and wear rubber gloves and chemical goggles. If contact occurs, rinse with plenty of water. In case of eye contact seek medical advice immediately. Refer to the Safety Data Sheet for MasterRoc SA I 60 admixture for further information.

## Packaging

MasterRoc SA I 60 admixture is supplied in 54 gal (205 L) drums, 264 gal (1,000 L) totes and by bulk delivery.

## Related Documents

Safety Data Sheets: MasterRoc SA I 60 admixture.

## Additional Information

For additional information on MasterRoc SA I60 admixture, contact your local sales representative.

*Master Builders Solutions creates technologies for the construction industry inspiring people to build better. We are active in ~40 countries and operate 35 production sites with over 1,600 employees. We develop, produce, and market high-quality chemical admixtures, as well as adjacent core technologies, to master the challenges of today and support a decarbonized future. Our people are pivotal and pair leading technologies and a strong brand heritage to surpass our customers' expectations and drive continuous value creation.*

## Limited Warranty Notice

Master Builders Solutions Admixtures US, LLC ("Master Builders Solutions") warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. MASTER BUILDERS SOLUTIONS MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is shipment to purchaser of product equal to the amount of product that fails to meet this warranty or refund of the original purchase price of product that fails to meet this warranty, at the sole option of Master Builders Solutions. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. MASTER BUILDERS SOLUTIONS WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

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