Aggregates for Earthwork



MasterSuna® RCT 323

Admixture for Returned Concrete Treatment

Description

MasterSuna RCT 323 admixture is a one-component product that is formulated to treat returned fresh concrete for subsequent beneficial use. It is an engineered powdered polymer that gels the fresh concrete resulting in very rapid stiffening and significantly minimizes cement hydration and strength development.

MasterSuna RCT 323 admixture comes in water-soluble bags and is added directly into the drum of the ready-mixed concrete truck.

MasterSuna RCT 323 admixture allows concrete producers to develop a returned concrete solution that eliminates the need for onsite concrete crushing and disposal into landfills.

Features

- One-component
- Low dosage for ease of use
- Fixed dosage to treat a variety of returned concrete mixtures
- Fast acting gels fresh concrete and provides rapid stiffening in two to five minutes

Benefits

- Provides concrete producers with a cost-effective solution to address returned fresh concrete
- Eliminates the need for onsite concrete crushing, which improves safety and reduces the carbon footprint
- Creates an environmentally sustainable solution to address the issue of returned concrete by diverting a waste material into beneficial applications

Directions for Use

MasterSuna RCT 323 admixture comes in 2.0 lb (0.9 kg) water-soluble bags. Each bag treats one cubic yard (0.75 cubic meter) of returned concrete.

Step One: Determine the volume of the returned concrete in the concrete mixer truck. Round it up to the next cubic yard (cubic meter).

Step Two: Charge the returned concrete to the top of the drum/fin. Place the required number of MasterSuna RCT 323 admixture bags into the concrete in the mixer drum. Add one bag of MasterSuna RCT 323 admixture for each cubic yard (0.75 cubic meter) of returned concrete. For example, 5 cubic yards of returned concrete require 5 bags of MasterSuna RCT 323 admixture (5 cubic meters require 7 bags). Run the drum at full mixing speed for two to three minutes after adding MasterSuna RCT 323 admixture. Once the concrete has been granulated, stop mixing.

Step Three: Discharge the treated concrete onto the ground by ribboning it back and forth to minimize the height of the concrete, preferably to less than 12 inches (300 mm). Avoid discharging the concrete into large piles.

Step Four: Back drag/flatten the treated pile within 2-4 hours, or at the end of the day before the loader is parked. Back dragging early provides better results.

Step Five: The next day (24 hours later), mix and turn the treated concrete piles using a front-end loader. Thoroughly turn the treated pile to break up any clumps of material. The treated material can be stored in piles and used as backfill or road-base material. With additional testing and qualification, material treated with MasterSuna RCT 323 admixture can be used as a partial replacement for coarse aggregates in concrete, depending on the local material specifications.

Performance Characteristics:

In concrete production, 5 to 15% replacement of coarse aggregates with the material treated with MasterSuna RCT 323 admixture has shown minimal impact on concrete slump, plastic air content and compressive strength. However, performance is dependent on local materials and, therefore, the material treated with MasterSuna RCT 323 admixture should be qualified prior to use in a concrete mixture.

It is important to review and follow industry guidelines and any local, state or provincial specifications prior to use.

For more information, contact your local sales representative.

Precautions:

Do NOT remove MasterSuna RCT 323 admixture from its water-soluble bags. If the powder material gets wet, it will activate and can stick to hands, gloves, clothing or other surfaces. If activated by water outside concrete, the powder material will become sticky. If a water-soluble bag breaks, dry sweep the powder material. Do not use water. Follow all precautions listed on the MasterSuna RCT 323 admixture SDS.

Safety:

Avoid contact with skin and eyes by using the required personal protective equipment, such as gloves and safety goggles. If contact with skin occurs, wash thoroughly using soap and water. If contact with eyes occurs, rinse thoroughly with an eyebath and seek medical advice.

Storage and Handling:

Storage: MasterSuna RCT 323 admixture must be stored in the original containers or other air-tight containers in a clean, dry area. Preferably it should be stored at an ambient temperature in the range of 40 °F to 105 °F (4 °C to 41 °C). If stored below 40 °F (4 °C), the water-soluble bags can become brittle and split open while handling. To alleviate this, it is recommended to warm pails with bags above 40 °F (4 °C) before use.

Shelf Life: MasterSuna RCT 323 admixture has a minimum shelf life of 12 months, when stored under recommended conditions. Depending on storage conditions, the shelf life may be greater than stated.

Packaging:

MasterSuna RCT 323 admixture is available in 2.0 lb (0.9 kg) water-soluble bags, packaged in 5-gal (19-L) pails. There are fifteen 2.0 lb (0.9 kg) bags in a 5-gal (19-L) pail and 36 pails on a pallet.

Related Documents

Safety Data Sheet: MasterSuna RCT 323 admixture

Additional Information

For Additional information on MasterSuna RCT 323 product contact your local sales representative.

Master Builders Solutions creates technologies for the construction industry inspiring people to build better. We are active in \sim 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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