

# MasterSuna RCT 323

Admixture for Returned Concrete Treatment

## Material 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 watersoluble 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.

## Characteristics & Benefits

- 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
- 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

## 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. For more information, contact your local Master Builders Solutions Technical Sales Representative.

## Directions for Use

**MasterSuna RCT 323** admixture comes in 0.9 kg water-soluble bags. Each bag treats 1 cubic metre of returned concrete.

1. Determine the volume of the returned concrete in the concrete mixer truck. Round it up to the next cubic meter.
2. Increase slump to 120 – 130mm.
3. 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 metre of returned concrete. For example, 5 cubic metres of returned concrete require 5 bags of **MasterSuna RCT 323** admixture. 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.
4. Discharge the treated concrete onto the ground by ribboning it back and forth to minimize the height of the concrete, preferably to less than 300 mm. Avoid discharging the concrete into large piles.
5. 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.
6. 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.

## Packaging

MasterSuna RCT 323 admixture is available 0.9 kg water-soluble bags, packaged in 19 litre pails. There are fifteen 0.9kg bags in a 19 litre pail and 36 pails on a pallet.



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## Storage & Shelf Life

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 4°C to 41°C.

If stored below 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 4°C before use.

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

## Precautions

Do NOT remove MasterSuna RCT 323 admixture from its watersoluble 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.

For the full health and safety hazard information and how to safely handle and use this product, make sure that you obtain a copy of the Safety Data Sheet (SDS) from our office or website.

## Disclaimer

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