

MasterSuna SBS 5005

Concrete admixture technology for manufactured sand
Sand Blocker Solutions

DESCRIPTION

MasterSuna SBS 5005 is an innovative polymer designed to improve the consistency and performance of concrete produced in pre-mixed and precast concrete plants.

MasterSuna SBS technology has been specifically developed to facilitate the production of concrete containing challenging sands. For optimum performance it must be used in combination with a water reducer or superplasticiser available from Master Builders Solutions.

Use of challenging sands in concrete

The aggregates for concrete are defined in AS 2758.1-1998, Aggregates and Rock for Engineering Purposes Part 1: Concrete Aggregates and also in the Guide to the Specification and Use of Manufactured Sand in Concrete.

The use of manufactured sand or crushed fine aggregate in concrete can pose difficulties not only to the concrete producer but also the user.

Sand obtained from parent rock with active mineralogy and clays has the potential to bind water in their structure. Also, certain clays have a tendency to absorb admixtures rendering them less effective in concrete.

Differing types and varying levels of clay contaminants make it hard to control the workability of concrete. Increasing quantities of active clays lead to higher water demand with adverse effects on the properties of concrete.

Innovative Sand Blocker Solutions

The unique nano-chemistry in **MasterSuna SBS 5005** is characterized by its strong affinity to clay contaminants present in concrete mixes. Dosed in combination with a water reducer and/or superplasticiser, **MasterSuna SBS** technology works by neutralizing the negative effects of active clays and hydrophilic materials. The combination of admixtures significantly improves the consistency and workability retention in concrete.

RECOMMENDED USES

- Concrete containing manufactured sand
- Mixes with high proportions of manufactured sand
- Controlling fine aggregates with active clays
- Pre-mixed concrete
- Piling concrete
- Post-tensioned concrete
- Precast & prestressed concrete
- Self-Compacting & Super Workable Concrete
- Shotcrete
- Remote locations

FEATURES AND BENEFITS

- Reduced mix costs
- Effective & compatible with manufactured sands
- Adaptable to varying levels of clay contaminants
- Reduced need for natural sands
- Improved mix efficiency
- Synergy with water reducers and superplasticisers
- Improves concrete appearance & rheology
- Facilitates production & consistent quality of concrete
- Preserves natural resources

APPLICATION

MasterSuna SBS 5005 is a ready-to-use liquid admixture that can be added to the concrete mix as a separate component with 70-90% of the initial batch water. Avoid adding the admixture to dry aggregates / cement. A separate dispenser and feed line must be used.

DOSAGE

The recommended range is 100ml to 400 ml per 100kg of manufactured sand content. The dosage depends on the nature of the manufactured sand and desired properties of concrete.

The dosage of MasterPozzolith, MasterPolyheed & MasterGlenium range of products can be reduced when used in conjunction with **MasterSuna SBS 5005**.

The optimum dosage should be determined by conducting trials using actual materials.

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COMPATIBILITY

MasterSuna SBS 5005 is not compatible with admixtures containing sulphonated naphthalene formaldehyde condensates.

MasterSuna SBS 5005 may be used in conjunction with other Master Builders Solutions admixtures such as MasterGlenium, MasterSure, MasterPolyheed, MasterPozzolith, MasterEase, MasterAir, MasterSet, MasterMatrix and MasterLife range of products.

It is imperative that any combination of admixtures must be tested in controlled laboratory or field trials to verify the desired performance of the concrete mix.

PACKAGING

MasterSuna SBS 5005 is supplied in bulk, 1000 litre pallecons and 205L drums.

STORAGE / SHELF LIFE

MasterSuna SBS 5005 must be stored in a clean, dry, well-ventilated area away from ignition sources, heat or flame. Protect from direct sunlight and freezing. **MasterSuna SBS 5005** has a shelf life of 12 months when stored under recommended conditions.

PRECAUTIONS

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 Master Builders Solutions Safety Data Sheet (SDS) from Master Builders Solutions local office or website.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

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