

MasterCell[®] 25

Admixture for Controlled Low Strength Materials (CLSM)

Formerly Rheocell Rheofill*

Description

MasterCell 25 admixture is a ready-to-use, self-contained product for use in various flowable fill applications where reduced densities (unit weights) and air contents of up to 35% are desired.

Applications

Recommended for use in:

- Backfill (flowable fill) – sewer trenches, utility trenches, bridge abutments, retaining walls, conduit trenches, etc.
- Structural Fill – foundation sub bases, floor slab bases, pipe bedding

Features

MasterCell 25 admixture produced CLSM can be used in any application in lieu of compacted soil. MasterCell 25 admixture is used in flowable fill mixes to lower the density (unit weight), eliminate settlement, and to control strength development. It produces stable air contents of 15-35% and reduces water content by as much as 50%.

Benefits

- Increased yield
- Optimum workability – can be produced in either fluid or plastic consistency
- Increased pumpability
- Little or no bleeding
- No segregation
- Reduced shrinkage
- Reduced settlement
- Control of strength development
- Cost-effective compared to in-place cost of compacted soil

Performance Characteristics

Technical Data

	Mix 1 1 yd ³ (0.8 m ³) Load	Mix 2 4 yd ³ (3 m ³) Load
Cement, lb/yd ³ (kg/m ³)	95 (56)	100 (60)
Sand, lb/yd ³ (kg/m ³)	2,260 (1,340)	2,220 (1,320)
Water, lb/yd ³ (kg/m ³)	308 (183)	177 (105)
MasterSet AC 534 admixture, fl oz/cwt (mL/100 kg)	16 (1,040)	–
MasterCell 25 admixture	1 Small Bag	1 Large Bag
Air Content	33%	35%
Compressive Strength, psi (MPa)		
@ 28 Days	40 (0.3)	110 (0.8)
@ 58 Days	60 (0.4)	160 (1.1)

Note: Setting times may be extended when high air content producing materials are used. If an earlier load bearing (set) time is desired, an accelerating admixture may be used in the flowable fill mixture.

Guidelines for Use

MasterCell 25 admixture is a powdered material packaged in a ready-to-use disintegrative bag. MasterCell 25 admixture is formulated for use in producing flowable fill mixtures. It is not recommended for use in conventional concrete.

MasterCell 25 admixture performs best when added to mixes with an initial slump of 1-3 in. (25-75 mm). If necessary, the water content of the mix should be adjusted to obtain a maximum 3 in. (75 mm) initial slump. The MasterCell 25 admixture bag is simply tossed into the truck hopper and mixed with the previously batched materials for a minimum of 5 minutes at slow mixing speed. It is not necessary to wash down the hopper after adding MasterCell 25 admixture.

MasterCell 25 admixture may be added at the jobsite or at the ready-mixed concrete plant.

Storage and Handling

Storage Temperature: MasterCell 25 admixture should be stored in a dry area at temperatures below 130 °F (54 °C).

Handling: The use of gloves and goggles are recommended when handling MasterCell 25 admixture.

Shelf Life: MasterCell 25 admixture has a minimum shelf life of 12 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 MasterCell 25 admixture has been exceeded.

Packaging

MasterCell 25 admixture is available in two sizes. The small bag will treat 1 yd³ (0.8 m³) and the large bag will treat 4 yd³ (3 m³). MasterCell 25 admixture is supplied by the case:

- 1 yd³ (0.8 m³) bag – 40 bags per case
- 4 yd³ (3 m³) bag – 20 bags per case

Related Documents

Safety Data Sheets: MasterCell 25 admixture

Additional Information

For additional information on MasterCell 25 admixture, contact your local sales representative.

The Admixture Systems business of BASF's Construction Chemicals division is the leading provider of solutions that improve placement, pumping, finishing, appearance and performance characteristics of specialty concrete used in the ready-mixed, precast, manufactured concrete products, underground construction and paving markets. For over 100 years we have offered reliable products and innovative technologies, and through the Master Builders Solutions brand, we are connected globally with experts from many fields to provide sustainable solutions for the construction industry.

Limited Warranty Notice

BASF 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. BASF 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 BASF. 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. BASF WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on BASF's present knowledge and experience. However, BASF assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. BASF reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.

* Rheocell Rheofill became MasterCell 25 under the Master Builders Solutions brand, effective January 1, 2014.

© BASF Corporation 2014 ■ 01/14 ■ OTH-DAT-0058

BASF Corporation
Admixture Systems
www.master-builders-solutions.basf.us

United States
23700 Chagrin Boulevard
Cleveland, Ohio 44122-5544
Tel: 800 628-9990 ■ Fax: 216 839-8821

Canada
1800 Clark Boulevard
Brampton, Ontario L6T 4M7
Tel: 800 387-5862 ■ Fax: 905 792-0651