

MasterGlenium® 3020

High-Range water-reducing admixture

Description

MasterGlenium® 3020 ready-to-use high-range water-reducing admixture is a patented new generation of admixture based on polycarboxylate chemistry. MasterGlenium® 3020 is very effective in producing concrete mixtures that provide different "working time" including self-compact concrete (SCC).

MasterGlenium® 3020 admixture meets ASTM C 494 requirements for Type A, water reducing, and Type F, high range water reducing admixtures.

Recommended for use in:

- Concrete applications requiring normal to high-early strength development
- Concrete applications requiring water reduction of 15 to 40 percent
- Concrete application requiring high-early strength (precast and pavement repair)
- Concrete where high flowability and durability are needed
- Self consolidating concrete (SCC)

Features

- Lower water content for certain workability
- Linear reduction of water throughout the recommended dosage range
- Can be used in a wide variety of concrete mixtures that require admixture type A or Type F
- Controlled rheology
- Development of extremely high-early strength

Benefits

- Produces cohesive concrete without segregation
- Reduce/eliminate need for vibration and heat curing
- Increase the productivity of precast operations
- Allows the passage of faster traffic for repairs of concrete pavements
- Reduction of construction costs due to higher productivity
- Increases the life service of structures

Performance Characteristics

Slump maintenance: MasterGlenium® 3020 has been developed to obtain an extremely high initial strength in the concrete mix. Consequently, the concrete settlement with this admixture is maintained for less time than concrete treated with conventional high-range water reducing admixture without treating. To facilitate the placement, the concrete with MasterGlenium® 3020 admixture must be placed in a lapse of twenty minutes after its addition. With the use of a retarder admixture like MasterSet® DELVO extensive setting control admixture can maintain the settlement of the concrete treated with MasterGlenium® 3020. It is recommended to carry out field tests to ensure that the desired settlement for a specified time

Guidelines for Use

Dosage: The recommended dosage range for MasterGlenium® 3020 is 200-800 ml/100 kg of cementitious material for most concrete mixtures. Due to the variations of the concrete material, conditions of the work and/or applications may require different ranges of dosage from those recommended. In such cases, contact your BASF sales representative.

Mixing: To obtain longer handling time, MasterGlenium® 3020 admixture must be added to the concrete mix in late form. You can add MasterGlenium® 3020 with initial water of the lot if the concrete is going to be placed immediately after mixing.

Concrete Placement: Concrete containing MasterGlenium® 3020 can be placed using conventional placing methods. The placement must be continuous and without interruption.

Product Notes

Corrosivity - Non-Chloride, Non-Corrosive: MasterGlenium® 3020 admixture will not initiate or promote corrosion of reinforcement steel embedded in concrete, in concrete prestressed or concrete placed in roof systems and galvanized steel floors. In the manufacture of this admixture no calcium chlorides were added intentionally.

In all concrete applications, MasterGlenium® 3020 complies with the minimum or strictest limits for chloride ion normally suggested by the standards and practices of the construction industry.

Compatibility: MasterGlenium® 3020 is compatible with the most admixture used in the production of concrete including other water-reducing admixtures of normal range, mid-range and high, air inclusions, accelerators, retarders, admixture for extensive setting control, inhibitors of the corrosion and shrinkage reducers.

MasterGlenium® 3020 is also compatible with slag and pozzolands such as fly ashes and silica fume. Do not use MasterGlenium® 3020 in combination with admixture that contain beta-naphthalene sulfonate, as erratic behaviors can occur with the slump and the pumped.

Storage and Handling

Storage Temperature: MasterGlenium® 3020 must be stored at temperatures above 5°C. If MasterGlenium® 3020 freezes, thaw and homogenize the product with light mechanical agitation. **Do not use pressurized air for agitation.**

Shelf Life: MasterGlenium® 3020 has a shelf life of 6 months at least. Depending on the storage conditions, the shelf life may be longer.

Packaging

MasterGlenium® 3020 admixture is supplied in 200 L (53 gal) drums, 1000 L (264 gal) totes and by bulk delivery.

Related Documents

Safety Data Sheets: MasterGlenium® 3020

Additional Information

For additional information on MasterGlenium® 3020 admixture or its use in developing concrete mixtures with special performance characteristics, 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.