Master X-Seed® 55
Strength-Enhancing Admixture

Features
- Improves cement hydration
- Increases strength development - both early- (1-day) and late-age (28-day)
- Enhances workability of high-performance concrete mixtures

Benefits
- Provides a strength safety factor and/or expanded performance space
- Reduces in-place concrete costs when utilized in optimized concrete mixtures
- Permits higher replacement levels of supplementary cementitious materials (SCMs)
- Permits earlier stripping and reuse of forms
- Helps reduce CO₂ emissions associated with concrete

Particle Seeding Technology
Master X-Seed 55 admixture is based on a BASF proprietary technology that ensures a stable suspension of synthetically-produced crystalline CSH nanoparticles. These particles act as active seeds in a concrete mixture to facilitate the growth of active crystals between cement particles. The unique technology of Master X-Seed admixture provides an unmatched improvement of the hydration process in a concrete matrix which increases early- and late-age strength development compared to a reference untreated concrete mixture.

Performance Characteristics
Rate of Hardening: Master X-Seed 55 admixture is formulated to provide similar-setting characteristics compared to a reference untreated concrete mixture. The time of setting of concrete is primarily influenced by ambient and concrete temperatures, as well as the chemical and physical compositions of the basic ingredients of the concrete. Therefore, trial mixtures should be made with job materials to determine the dosage required for a given application.

Applications
Recommended for use in:
- Green Sense® Concrete
- Ready-mixed concrete
- Prestressed concrete
- Precast concrete
- Self-consolidating concrete (SCC)
Master X-Seed 55

Guidelines for Use

Dosage: Master X-Seed 55 admixture has a recommended dosage range of 4 to 15 fl oz/cwt (260 to 980 mL/100 kg) of cementitious materials. Because of variations in concrete materials, jobsite conditions and/or applications, dosages outside of the recommended range may be required. In such cases, contact your local sales representative.

Mixing: Master X-Seed 55 admixture can be added with the initial batch water or as a delayed addition.

Product Notes:

Corrosivity – Non-Chloride, Non-Corrosive: Master X-Seed 55 admixture will neither initiate nor promote corrosion of reinforcing steel embedded in concrete, prestressing steel or of galvanized steel floor and roof systems. Neither calcium chloride nor other chloride-based ingredients are used in the manufacture of Master X-Seed 55 admixture.

Compatibility: Master X-Seed 55 admixture is compatible with most admixtures used in the production of quality concrete, including normal, mid-range and high-range water-reducing admixtures, air-entrainers, accelerators, retarders, extended set control admixtures, corrosion inhibitors, and shrinkage reducers.

Master X-Seed 55 admixture has only been tested with other admixtures manufactured by BASF. Thus, use of Master X-Seed 55 admixture with non-BASF admixtures may produce unpredictable results. BASF denies any warranty expressed or implied with respect to any application using a non-BASF admixture in combination with Master X-Seed 55 admixture.

Storage and Handling:

Storage Temperature: Master X-Seed 55 admixture must be stored at temperatures above 40 °F (5 °C). If Master X-Seed 55 admixture freezes, thaw and reconstitute by mechanical agitation. Do not use pressurized air for agitation.

Shelf Life: Master X-Seed 55 admixture has a minimum shelf life of 12 months. Depending on storage conditions, the shelf life may be greater than stated. If the product is not utilized within 3 months, agitation may be required.

Packaging:

Master X-Seed 55 admixture is supplied in 55 gal (208 L) drums, 275 gal (1040 L) totes and by bulk delivery.

Related Documents

Safety Data Sheets: Master X-Seed 55 admixture

Additional Information

For additional information on Master X-Seed 55 admixture, or its use in developing a concrete mixture 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.