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03 30 00	Cast-in-Place Concrete
03 40 00	Precast Concrete
03 70 00	Mass Concrete
3   00 00	Earthwork
04 05 16	Masonry Grouting



# MasterSure<sup>®</sup> Z 60 Workability-Retaining Admixture

# Description

MasterSure Z 60 admixture is a workability-retaining admixture that provides flexible degrees of slump retention without retardation. MasterSure Z 60 admixture provides concrete producers a costeffective means of maintaining consistency between loads of concrete with respect to slump, workability and air content. MasterSure Z 60 admixture meets ASTM C 494/C 494M requirements for Type S, Specific Performance, admixtures.

# Applications

Recommended for use in:

- Concrete with varied slump retention requirements
- Concrete mixtures utilizing supplementary cementitious materials
- Concrete where high flowability, increased stability and durability are needed
- Production of selfconsolidating concrete (SCC) mixtures
- Geotechnical grouting and ground improvement

# Features

- Provides flexible degrees of slump and workability retention without retardation
- Can be used in low- to high-slump concrete mixtures, including self-consolidating concrete
- Can be used alone or in combination with MasterPozzolith<sup>®</sup>, MasterPolyheed<sup>®</sup> or MasterGlenium<sup>®</sup> normal, mid-range and high-range water-reducing admixtures
- Improved early- and late-age compressive strengths

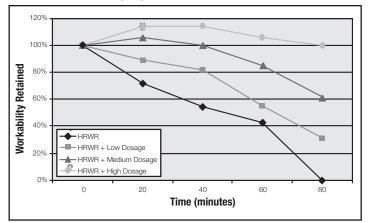
## Benefits

- Minimizes the need for jobsite slump adjustment using water or high-range water-reducing admixture
- Provides consistency in air-entrainment, slump, workability and strength
- Fewer rejected loads and better customer satisfaction due to consistent quality of concrete
- Faster truck turn-around time
- Expanded concrete delivery range
- Provides concrete producers with ability to consistently produce and deliver quality concrete mixtures



### **Performance Characteristics**

The data in the following graph represents the slump and workability performance that can be achieved through the use of MasterSure Z 60 admixture. The four mixtures were evaluated at a concrete temperature of 90 °F (32 °C). The first mixture utilized a high-range water reducer (HRWR) without MasterSure Z 60 admixture. The three remaining mixtures utilized the same high-range water reducer with a low, medium and high dosage of the MasterSure Z 60 admixture. These mixtures had 600 lb/yd<sup>3</sup> (356 kg/m<sup>3</sup>) of cement and a water-cement ratio (w/c) of 0.40.



#### **Guidelines for Use**

**Dosage:** MasterSure Z 60 admixture has a recommended dosage range of 2 to 12 fl oz/cwt (130 to 780 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:** MasterSure Z 60 admixture can be added with the initial batch water or as a delayed addition.

#### **Product Notes**

**Corrosivity – Non-Chloride, Non-Corrosive:** MasterSure Z 60 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 MasterSure Z 60 admixture.

**Compatibility:** MasterSure Z 60 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.

Do not use MasterSure Z 60 admixture with admixtures containing beta-naphthalene sulfonate. Erratic behaviors in slump, workability retention and pumpability may be experienced.

MasterSure Z 60 admixture has only been tested with admixtures manufactured by Master Builders Solutions. As a result, use of MasterSure Z 60 admixture with non-Master Builders Solutions admixtures may produce unpredictable results. Master Builders Solutions denies any warranty expressed or implied with respect to any application using a non-Master Builders Solutions admixture in combination with the use of MasterSure Z 60 admixture.

#### **Storage and Handling**

**Storage Temperature:** MasterSure Z 60 admixture must be stored at temperatures above 40 °F (5 °C). If MasterSure Z 60 admixture freezes, thaw and reconstitute by mechanical agitation. **Do not use pressurized air for agitation.** 

**Shelf Life:** MasterSure Z 60 admixture has a minimum shelf life of 12 months. Depending on storage conditions, the shelf life may be greater than stated.

# Packaging

MasterSure Z 60 admixture is supplied in 55 gal (208 L) drums, 275 gal (1040 L) totes and by bulk delivery.

# **Related Documents**

Safety Data Sheets: MasterSure Z 60 admixture

# **Additional Information**

For additional information on MasterSure Z 60 admixture or on its use in developing concrete mixtures with special performance characteristics, contact your local sales representative.

Master Builders Solutions creates technologies for the construction industry inspiring people to build better. We are active in  $\sim$ 40 countries and operate 35 production sites with over 1,600 employees. We develop, produce, and market high-quality chemical admixtures, as well as adjacent core technologies, to master the challenges of today and support a decarbonized future. Our people are pivotal and pair leading technologies and a strong brand heritage to surpass our customers' expectations and drive continuous value creation.

# **Limited Warranty Notice**

Master Builders Solutions Admixtures US, LLC ("Master Builders Solutions") 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. MASTER BUILDERS SOLUTIONS 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 Master Builders Solutions. 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. MASTER BUILDERS SOLUTIONS WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

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