

03 30 00	Cast-in-Place Concrete
03 40 00	Precast Concrete
03 70 00	Mass Concrete

MasterGlenium[®] I466

High-Range Water-Reducing Admixture

Description

MasterGlenium I466 ready-to-use high-range water-reducing admixture is a new generation, patent pending admixture based on polycarboxylate chemistry. MasterGlenium I466 admixture is very effective in producing concretes with different levels of workability.

MasterGlenium I466 admixture is particularly effective in improving concrete mixtures with reduced portland cement contents without compromising 28-day strength requirements. MasterGlenium I466 admixture meets ASTM C 494/C 494M requirements for Type A, water-reducing, and Type F, high-range water-reducing, admixtures.

Applications

Recommended for use in:

- Concrete with varying water reduction requirements (5-40%)
- Concrete where high flowability, increased stability and durability are needed
- Producing self-consolidating concrete (SCC)
- Strength-on-demand concrete, such as 4x4[™] Concrete
- Pervious concrete

Features

- Maximum dosage effectiveness for a given water reduction
- Controlled rheology
- Robust air-entraining admixture compatibility
- Improved strength development

Benefits

- Can be used in a wide variety of concrete mixtures as a Type A or Type F admixture
- Improved finishability and surface appearance
- Mixture development flexibility for cement reductions and/or increased use of supplementary cementitious materials

Performance Characteristics

Compressive Strength: Concrete produced with MasterGlenium I466 admixture achieves significantly higher 28-day compressive strength compared to plain concrete and concrete mixtures containing naphthalene, melamine, and early generation polycarboxylate high-range water-reducing admixtures.

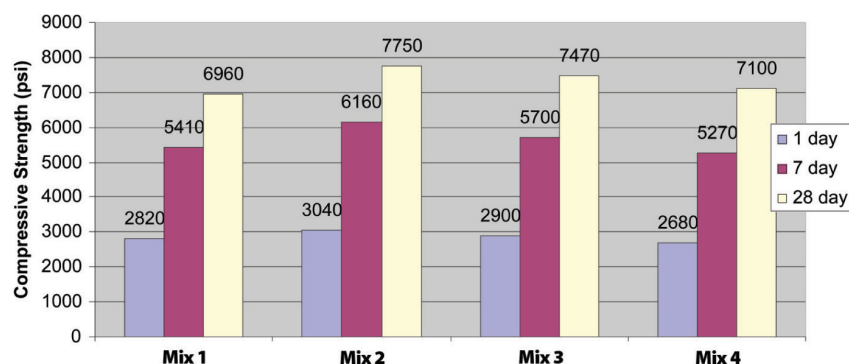
Mixture Data: Type I portland cement; Ambient Temperature, 70 °F (21 °C)

Mix 1: 620 lb/yd³ (367 kg/m³); w/c = 0.43; Conventional PC HRWR

Mix 2: 620 lb/yd³ (367 kg/m³); w/c = 0.43; MasterGlenium I466

Mix 3: 600 lb/yd³ (356 kg/m³); w/c = 0.44; MasterGlenium I466

Mix 4: 580 lb/yd³ (344 kg/m³); w/c = 0.46; MasterGlenium I466



Guidelines for Use

Dosage: MasterGlenium I466 admixture has a recommended dosage range of 2-10 fl oz/cwt (130-650 mL/100 kg) of cementitious materials. For most applications, dosages in the range of 2-6 fl oz/cwt (130-390 mL/100 kg) will provide excellent performance. Because of variations in concrete materials, job site conditions and/or applications, dosages outside of the recommended range may be required. In such cases, contact your local sales representative.

Mixing: MasterGlenium I466 admixture can be added with the initial batch water or as a delayed addition. However, optimum water reduction is generally obtained with a delayed addition.

Product Notes

Corrosivity – Non-Chloride, Non-Corrosive: MasterGlenium I466 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 MasterGlenium I466 admixture.

Compatibility: MasterGlenium I466 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 MasterGlenium I466 admixture with admixtures containing naphthalene sulfonate. Erratic behaviors in slump, workability retention and pumpability may be experienced.

Storage and Handling

Storage Temperature: MasterGlenium I466 admixture must be stored at temperatures above 40 °F (5 °C). If MasterGlenium I466 admixture freezes, thaw and reconstitute by mechanical agitation. **Do not use pressurized air for agitation.**

Shelf Life: MasterGlenium I466 admixture has a minimum shelf life of 6 months. Depending on storage conditions, shelf life may be greater than standard. Please contact your local sales representative regarding suitability for use and dosage recommendations if the shelf life of MasterGlenium I466 admixture has been exceeded.

Packaging

MasterGlenium I466 admixture is supplied in 55 gal (208 L) drums, 275 gal (1040 L) totes and by bulk delivery.

Related Documents

Safety Data Sheets: MasterGlenium I466 admixture

Additional Information

For additional information on MasterGlenium I466 admixture or 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 ~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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