

MasterPel® 240

Water-Repellent and Efflorescence Control Admixture

Description

MasterPel 240 multi-purpose admixture is used in a variety of water-repellent and efflorescence control applications. This unique formula is based on a novel silane chemistry that is different from that of conventional water-repellent admixtures in the concrete industry.

MasterPel 240 admixture has been tested under an extended ASTM E514 standard and has demonstrated excellent wind-driven rain resistance during the 72-hour testing period.

MasterPel 240 admixture meets ASTM C 494/C 494M requirements for Type S, Specific Performance, admixtures.

Applications

Recommended for use in:

- Architectural blocks
- Single-wythe masonry construction
- Paving stones
- Segmental retaining wall units
- Concrete roof tiles
- Precast /prestressed concrete
- Ready-Mixed Concrete

Features

Masonry

- Contains components that enhance color and reduce efflorescence potential
- Part of block producer water-repellency certification program
- Enhances bond strength with use of MasterPel mortar additives
- Provides improved material flow and extrusion characteristics

Concrete

- Reduces capillary absorption

Benefits

- Superior water repellency versus conventional water-repellent admixtures
- Significantly reduces secondary efflorescence (improves primary efflorescence control)
- Improves color vibrancy and pigment efficiency
- Increases compressive and flexural strengths
- Increases production rate
- Adds visual appeal

Guidelines for Use

Dosage: Use MasterPel 240 admixture at a dosage in the range of 1–5 fl oz/cwt (65–325 mL/100 kg) of cementitious materials depending on the desired benefits.

Efflorescence Control: Typically 1–5 fl oz/cwt (65–325 mL/100 kg) of cementitious materials.

Water Repellency - Masonry: Typically 2–5 oz/cwt (130–325 mL/100 kg) of cementitious materials.

Water Repellency - Concrete: Typically 4–5 fl oz/cwt (260–325 mL/100 kg) of cementitious materials.

Optimum water repellency dosage rates are determined through mix evaluation and testing procedures. Please consult with your local sales representative if dosages outside of the listed ranges are being considered.

To further improve the color efficiency and strength performance, the addition of a MasterPel high-performance plasticizing admixture is recommended.

Mixing: For maximum efficiency, add MasterPel 240 admixture early in the sequencing procedure. Best results typically occur by adding the MasterPel 240 admixture during the prewet process (with at least 70–80% of the required mix water), before adding the cementitious materials. Allow a minimum of 90 seconds of additional mixing time after all components have been dispensed.

Product Notes

Design and Construction Considerations: Design and construction details must observe all applicable design codes, incorporating the recommendations of NCMA TEK 10-1A: Crack Control in Concrete Masonry Walls; TEK 19-1: Water Repellents for Concrete Masonry Walls; TEK 19-2A: Design for Dry-Single-Wythe Concrete Masonry Walls; TEK 19-4A: Flashing Strategies for Concrete Masonry Walls; TEK 19-5A: Flashing Details for Concrete Masonry Walls.

Note: MasterPel admixture must be used in the masonry mortar in order to produce a moisture penetration-resistant wall system. Failure to do so will result in compromised water repellency of the masonry structure. Consult your local sales representative for applicable design details and specifications.

MasterPel 240 admixture will not compensate for flaws in building design, materials, mix proportions, improper production procedures or improper construction methods. Master Builders Solutions Construction Chemicals is not responsible for inappropriate use of MasterPel 240 admixture.

Proper block manufacturing methods, proper masonry mortar proportioning and mixing and proper use of MasterPel 240 admixture must be followed. Raked joints should not be permitted for water-repellent admixture system masonry projects. Remove excess mortar promptly and clean any residue using procedures recommended in NCMA TEK 8-2: Removal of Stains from Concrete Masonry.

Storage and Handling

Storage Temperature: MasterPel 240 admixture must be stored at temperatures above 40 °F (4 °C) and below 105 °F (42 °C). MasterPel 240 admixture should not be used after it freezes.

Shelf Life: When properly stored, MasterPel 240 admixture has a shelf life of 12 months. Please contact your local sales representative regarding suitability for use and dosage recommendations if the shelf life of MasterPel 240 admixture has been exceeded.

Recirculation: Proper recirculation is required to maintain the integrity of the products. A low pressure pump is recommended for recirculation. **Do not use pressurized air to recirculate.** Please consult your local sales representative for additional information on recirculation.

Packaging

MasterPel 240 admixture is available in 52 gal (197 L) drums and 255 gal (966 L) totes.

Related Documents

Safety Data Sheets: MasterPel 240 admixture

Additional Information

For additional information on MasterPel 240 admixture, consult 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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