

MasterRoc[®] MF 308

High-performance admixture for improved homogeneity, pumpability and placeability of low-cohesion mine backfill mixes

Description

MasterRoc MF 308 admixture is an aqueous solution of a high-molecular weight synthetic copolymer. MasterRoc MF 308 admixture is formulated to improve the rheological behavior and in-situ properties of placed backfill. MasterRoc MF 308 admixture offers superior stability by increasing resistance to segregation, while acting as a pumping aid and facilitating placement with significant improvement in the homogeneity of the placed fill.

Applications

Recommended for use in:

- All types of hydraulic, low density paste fills and cemented aggregate fills
- Paste/hydraulic fills with lower solids content and/or poor gradation
- Segregation-prone fills like cemented hydraulic and aggregate fills

Features

- Improves rheological behavior in low- to high-density slurries as well as in cemented aggregate fills
- Improves cohesion and captivation of fines and binder inside the fill mass
- Lubricates the fill
- Acts as a pumping aid
- Improves flow characteristics
- Enhances robustness of the fill

Benefits

- Enhances pumping and self leveling of the fill
- Reduces segregation
- Facilitates production of highly fluid paste and more coherent and homogenous cemented aggregate fills
- Provides stability during transportation and placement
- Improves plastic behavior and lowers porosity of the fill
- Increases compressive strengths
- Reduces slime in the slump
- Reduces water addition requirements
- Improves reliability of fill delivery and increased production
- Permits mix optimization and/or cost savings due to binder reduction (cement/slag cement/fly ash)
- Makes mixes less sensitive to solid content variation and/or water demand
- Improves mechanical properties of self-leveling fluid, making in-situ properties more consistent
- Improves flow characteristics resulting in less wear and tear on pumps and pipes, thus extending equipment service life
- Does not effect setting times within the recommended dosage rate

Performance Characteristics

Technical Data

Form	Liquid
Color	Transparent
Density	62.4 ± 0.6 lb/ft ³ (1.0 ± 0.01 g/cm ³)
pH	7 - 9.5
Viscosity	500 – 1200 cP (500 - 1200 mPa.s)
Solubility in water	Completely miscible
Chloride content	<0.1%

Guidelines for Use

Dosage: The dosage range for MasterRoc MF 308 admixture is typically between 3 and 15 fl oz per ton (100 and 500 mL per tonne) of backfill. Dosages in the range of 9 to 15 fl oz per ton (300 to 500 mL per tonne) are recommended for systems requiring higher degrees of stability. Because of variation in backfill materials, backfill plant conditions, and transportation requirements, application dosage outside of the recommended range may be required.

MasterRoc MF 308 admixture is typically added to the fill during the mixing process together with water. For additional assistance, please contact your local sales representative.

Product Notes

Corrosivity- Non-Chloride, Non-Corrosive: MasterRoc MF 308 admixture will neither initiate nor promote corrosion of metal parts or pipe lines of the backfill plant. MasterRoc MF 308 admixture does not contain intentionally-added chlorides.

Compatibility: Do not use MasterRoc MF 308 admixture with admixtures containing beta-naphthalene sulfonate such as MasterRheobuild® 1000. Erratic behaviors in slump, slump flow and pumpability may be experienced in such cases. MasterRoc MF 308 admixture is compatible with most Master Builders Solutions admixtures used in backfill including normal, mid-range and high-range water-reducing admixtures, air entrainers, retarders, extended set-control admixtures, workability-retaining admixture and shrinkage reducer. However, a field trial is recommended to verify the desired performance when MasterRoc MF 308 admixture is used with other admixtures.

MasterRoc MF 308 admixture is typically not chemically reactive with most backfill materials.

Storage and Handling

Storage Temperature: MasterRoc MF 308 admixture should be stored between 40 and 100 °F (4 and 38 °C). If MasterRoc MF 308 admixture freezes, consult your local sales representative.

Shelf Life: MasterRoc MF 308 admixture has a minimum shelf life of 12 months. Depending on storage conditions, the shelf life may be greater than stated. Store under cover, out of direct sunlight and protect from extreme temperatures. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. Please contact your local sales representative regarding suitability for use and dosage recommendations if the shelf life of MasterRoc MF 308 admixture has been exceeded.

Packaging

MasterRoc MF 308 admixture is supplied in 55-gal (208 L) drums, 275-gal (1040 L) totes or by bulk delivery.

Additional Information

For additional information on MasterRoc MF 308 admixture and our entire portfolio of backfill solutions, 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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