

MasterRoc MF 308

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

MATERIAL 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 behaviour 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

- 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

Form	Liquid
Colour	Transparent
Density	1.0 ± 0.01 g/cm ³
pH	7 – 9.5
Viscosity	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 100 and 500 mL per tonne of backfill. Dosages in the range of 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 pipelines 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 behaviours 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

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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 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 210 L drums, 1000 L flowbins 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.

NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

MB Construction Chemicals Solutions South Africa (Pty) Ltd reserves the right to have the true cause of any difficulty determined by accepted test methods. Undertaking such tests is not, and shall not be deemed to be, an admission of liability or an assumption of any risk, loss, damage or liability.

QUALITY AND RESPONSIBLE CARE

All products originating from MB Construction Chemicals Solutions South Africa (Pty) Ltd are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, environmental and occupational health and safety standards.

* Properties listed are based on laboratory controlled tests.

DISCLAIMER

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