

MasterRoc[®] MF 503

Robust polymer admixture to improve the consistency of cementitious mine backfill

Material Description

MasterRoc MF 503 is a liquid admixture to produce better, more uniform, quality cementitious backfill mixes. It can reduce the quantity of mixing water in backfill mixes for a given consistency, with greater economy, for a given strength.

Areas of Application

MasterRoc MF 503 admixture is recommended for use in most types of cementitious mining backfill mixes where increased performance through improved rheology, flowability, and uniformity are required or desired.

The admixture improves the flowability of the backfill mix and can provide real strength gains by reducing the water content for a given rheology and strength.

When used in conjunction with another admixture each admixture must be dispensed separately into the mix.

Characteristics and Benefits

MasterRoc MF 503 admixture can aid in the production of backfill mixes with these special qualities:

- Greater flowability with superior rheology
- Reduced water content for a given consistency
- Increased strength – compressive & flexural
- Greater economy in a mix designed for a given strength and rheology
- Easier transport via the reticulation scheme
- Reduced segregation and increased durability
- Potential binder cost savings
- Effective with high fines content mixes
- Reduces pumping pressure and shear viscosity of the fill
- Can allow higher solids content mixes

Packaging

MasterRoc MF 503 is available in 1000 liter IBC or by bulk delivery.

Application Procedure

MasterRoc MF 503 can be dispensed directly into the water or the entire wetted out mix. It should not be dispensed directly onto the dry binder or with other admixtures.

Dosage

MasterRoc MF 503 is normally used at the rate of 400-800ml per wet ton of fill. However, dose rates outside the recommended may be used following trial mixes. For dose rates per m³ of fill, multiply wet ton dose rate by the wet fill density.

Compressive Strength

A mix containing MasterRoc MF 503 can develop higher early and ultimate strengths, when compared to a mix without admixture, particularly when increasing solids content. For additional information on MasterRoc MF 503 and its use in developing a mine backfill mix with special performance characteristics, contact your local Master Builders Solutions Technical Sales Representative

Storage

MasterRoc MF 503 should be stored under cover in closed original containers in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Store protected against freezing, and from direct sunlight in original container. The recommended storage temperature range of MasterRoc MF 503 is 5°C to 35°C. The product has a shelf life of 12 months when properly stored at the recommended temperatures in an un-opened container.

Precautions

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the Master Builders Solutions Material Safety Data Sheet (SDS)



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Disclaimer

The information given here is true, represents our best knowledge and is based not only on laboratory work but also on field experience. However, because of numerous factors affecting results, we offer this information without guarantee and no patent liability is assumed. For additional information or questions, please contact your local representative.

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