

MasterRoc[®] MF 906

High-Performance Water-Reducing Admixture for Cementitious Mine Backfill

Description

MasterRoc MF 906 is a high-performance liquid admixture specifically engineered to enhance the efficiency of cementitious backfill mixtures and streamline backfill operations. It improves the rheological properties of cementitious backfill mixtures, leading to more uniform and controlled processes. MasterRoc MF 906 admixture reduces friction losses, lowers water demand to achieve the desired consistency, and enhances unconfined compressive strength (UCS).

Applications

- Cemented paste fill
- Cemented high-density hydraulic fill
- Cemented rock fill
- Cemented aggregate fill
- Composite aggregate paste fill

Features

- Reduces friction losses in pipes
- Lowers pumping and distribution pressures
- Improves rheological stability and improves slump and flow properties
- Reduces the water content of the backfill mix (for a given slump)
- Increases in-place strength at all ages
- Reduces permeability and shrinkage in hardened fill
- Quick wetting effect, high-efficiency mixing, and higher flow rates

Benefits

- Mix optimization and cost savings by reduction of binders (cement, slag cement, fly ash)
- Enhanced workability of cementitious backfill materials, requiring less water
- Higher in-situ strengths of the backfill materials
- Reduces the cycle time and increases production efficiency

Technical data

Form	Liquid
Color	Colorless (light yellowish to brownish)
Density*	64.9 ± 1.25 lb/ft ³ (1.04 ± 0.02 g/cm ³)
pH*	8.5 ± 1
Chloride content	< 0.1%
*at 68°F (20°C)	

Guidelines for Use

Dosage: The dosage range of MasterRoc MF 906 admixture may be affected by the total cementitious material contents of the mixture and by the particle size distribution of the backfill materials. The normal dosage range of MasterRoc MF 906 admixture is 6 – 34 fl oz/ton (200 – 1000 mL/tonne) of total backfill.



Dosage rates outside the recommended range may be used after conducting trial mixes.

Application Procedure: MasterRoc MF 906 admixture can be dispensed directly into the mixing water or the wetted-out mix at the paste mixer. However, MasterRoc MF 906 admixture should NOT be dispensed directly onto the dry binder.

Product Notes

Corrosivity: Non-Chloride, Non-Corrosive: MasterRoc MF 906 admixture does not contain intentionally added calcium chloride or chloride-based ingredients.

Compatibility: When used in combination with other admixtures supplied by Master Builders Solutions, each admixture must be dispensed separately into the mix. Lab testing is recommended before use.

Do not use MasterRoc MF 906 admixture with products containing beta-naphthalene-sulfonate. Erratic behaviors in slump, slump flow, and pumpability may be experienced.

For directions on the proper evaluation of MasterRoc MF 906 admixture in specific backfill applications, contact your local Master Builders Solutions representative.

Storage and Handling

Storage Temperature: MasterRoc MF 906 admixture should be stored at temperatures above 40°F (5°C), and be kept away from excessive heat and direct sunlight. If MasterRoc MF 906 admixture freezes, thaw at temperatures above 35°F (2°C), and reconstitute completely by mild agitation. Do not use pressurized air for agitation.

Shelf Life: MasterRoc MF 906 admixture has a minimum shelf life of 12 months when properly stored. Please contact your local Master Builders Solutions representative regarding suitability for use and dosage recommendations if the shelf life of MasterRoc MF 906 admixture has been exceeded.

Packaging

MasterRoc MF 906 admixture is supplied in 1000kg IBC totes, or by bulk delivery upon request.

Related Documents

Safety Data Sheet: MasterRoc MF 906 admixture.

Additional Information

For additional information on MasterRoc MF 101 admixture or its use in developing a backfill 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

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