MasterRoc MP 650 SR

Sulphate resisting micro fine Portland cement for rock and soil injection

MATERIAL DESCRIPTION

MasterRoc MP 650 SR is a well graded cement milled from pure Portland cement clinker with a Blaine value of 650 m^2/kg. It is milled from sulphate resistant Portland cement clinker with a low C_3A and low alkali content. Due to its small particle size and a specially adapted admixture system, it penetrates tight joints, fissures and pores very well to provide a water-tight grouted rock or soil mass.

FIELD OF APPLICATION

- Pre-injection in underground structures
- Post injection
- Water ingress reduction
- Ground stabilization
- Contact injection

FEATURES AND BENEFITS

- Excellent penetration in tight joints, fissures and pores
- Fast setting
- Durable
- Better working environment - no hazardous components
- Economical solution
- Standard cement injection equipment can be used

PACKAGING

MasterRoc MP 650 SR is supplied in 20 kg plastic bags and 1000 kg bags.

TECHNICAL DATA*

Fineness (Blaine)	> 650 m^2/kg

Particle size distribution:

<40 micron	100 %
<30 micron	99 %
<20 micron	97 %
<15 micron	93 %
<10 micron	79 %
< 5 micron	47 %

SETTING TIMES

MasterRoc MP 650 SR has the same setting time as normal fine cement with the initial set in > 4 hours.

Injection grout properties indicated below, relate to a mix containing 1.5% MasterGlenium 151C:

Water/Cement ratio	1.0
Mud balance:	1.48 - 1.50 kg/l
Flow cone:	32 - 34 s
Bleeding (maximum)	2 %

APPLICATION PROCEDURE

Mixing:

MasterRoc MP 650 SR should always be used with MasterGlenium 151C water reducing admixture (1.0 – 1.5 % of the cement weight). The w/c ratio (by weight) should normally be between 0.6 and 1.0.

- Fill the mixer with water
- Add MasterGlenium 151C
- Add cement and mix for 2 minutes
- Transfer to agitator

It is very important to use an efficient mixer. Colloidal mixers give the best result. Minimum rpm for colloidal mixers is 1500.

NB: Do not over mix. Mixing longer than recommended may cause the grout temperature to increase and set in the pump and/or hoses.

Pot life:

The mix should be kept under constant agitation prior to injection. **MasterRoc MP 650 SR** has a pot life in excess of 90 minutes.

Injection:

High-pressure piston pumps are normally used to pump the suspension into the rock.

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Hardening:

MasterRoc MP 650 SR has setting times comparable to regular Portland and other micro fine cements. It will have set sufficiently to allow drilling in less than 24 hours.

STORAGE

MasterRoc MP 650 SR has a shelf life of 9 months when stored in the original closed bags in ventilated dry areas.

SAFETY PRECAUTIONS

Any physical contact (e.g. skin or eyes) with the product should be avoided, as it may cause irritation or burns.

If such a contact occurs, the affected area should be washed with plenty of clean water. In case of eye contact, seek immediate medical advice.

For further information please refer to the Material Safety Data Sheet or contact your local Master Builders Solutions 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.