

MasterRheobuild 2000PF

Superplasticizer for high performance concrete and a dispersing agent for MasterRoc[®] micro-cements for ground injection

DESCRIPTION

MasterRheobuild 2000PF is an admixture containing multi-functional, water soluble sulphonated polymers of various chemical composition, specifically affecting the different mineralogical components of cement.

When MasterRheobuild 2000PF is added to concrete, the molecules of the polymer, having a negative charge, absorb onto the surface of the cement grains. This causes an electrostatic repulsion to occur amongst the cement grains, making their dispersion in water easier and consequently the mix more flowable. The action of MasterRheobuild 2000PF occurs even when Portland cement clinker is mixed with other materials (e.g. pozzolans, fly ash, slags and microsilica) in the production of blended cements.

FIELDS OF APPLICATION

MasterRheobuild 2000PF is designed for use in the manufacture of high quality concrete, such as:

- Pre-cast concrete tunnel linings, trackbed concrete, segment and structural members cured at normal and elevated temperatures
- Cast in-situ concrete tunnel linings
- Pre-stressed and post tensioned concrete
- Annulus grouts for backfill grouting in tunnels
- Sprayed Concrete
- High early strength, high workability concrete
- To disperse MasterRoc micro-cements for injection applications
- Underwater concrete
- Structural concrete

FEATURES AND BENEFITS

- Provides high early and ultimate strengths
- Allows the improvement of all hardened concrete properties such as permeability, bond to steel, dimensional stability and durability
- Chloride free (zero added chloride)

CEMENT INJECTION

MasterRheobuild 2000PF has been found to be particularly beneficial in dispersing the MasterRoc[®] micro-cements to allow enhanced penetration properties. In these applications MasterRheobuild 2000PF should be dosed at 1.5 – 2% on cement weight, with a water/cement ratio of 1. This will provide a stable mixture able to penetrate the finest groundmass cracks.

DOSAGE

MasterRheobuild 2000PF is generally dosed at 1.5 – 2.0 litres per 100 kg of cement.

The dosage rates given above are for typical usages, they are not meant as absolute limits, as other dosages may be utilised in special cases according to specific job conditions. If required consult Master Builders Solutions Technical Services Department for advice. Trial mixes should be carried out to ensure optimum dosage and effect.

MIXING

- Fill the mixer with water.
- Add MasterRheobuild 2000PF.
- Add cement. Mix for 2 minutes.
- Transfer to agitator.

COMPATIBILITY

MasterRheobuild 2000PF is compatible with all types of Portland, Pozzolanic and Slag cements. As a general rule, MasterRheobuild 2000PF is compatible with all admixtures complying with ASTM and UNI standards. Other admixtures should be dispensed separately into the concrete and not combined with MasterRheobuild 2000PF before addition.

Do not use MasterRheobuild 2000PF with the MasterRoc[®] Total Consistency Control system without consulting your local representative.

PACKAGING

MasterRheobuild 2000PF is supplied in 1000-litre IBC's and 25-litre containers.

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CONTACT DETAILS

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Product Data	
Appearance:	Brown liquid
Specific gravity @ 20°C:	1.24 ± 0.01 g/cm ³
pH-value:	8.0 ± 1
Solubility in water:	Total
Physiological effect	No- irritant
Logistics	
Shelf life:	12 months if stored according to manufacturer's instructions in unopened container.
Storage conditions:	Store in original sealed containers and at temperatures between 5°C and 30°C. Store under cover, out of direct sunlight and protect from extremes of temperature. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.
Handling and transportation:	Refer to MasterRheobuild 2000PF Safety Data Sheet
Disposal:	Refer to MasterRheobuild 2000PF Safety Data Sheet

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Health and Safety

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Spillage

Chemical products can cause damage; clean spillage immediately.

DISCLAIMER

"Master Builders Solutions" (the Company) endeavours to ensure that advice and information given in Product Data Sheets, Method Statements and Material Safety Data Sheets (all known as Product Literature) is accurate and correct. However, the Company has no control over the selection of its products for particular applications. It is important that any prospective customer, user or specifier, satisfies him/her-self that the product is suitable for the specific application. In this process, due regard should be taken of the nature and composition of the background/base and the ambient conditions both at the time of laying/applying/installing the material and when the completed work is to be brought into use.

Accordingly, no liability will be accepted by the Company for the selection, by others, of a product, which is inappropriate to a particular application.

Products are sold subject to the Company's standard conditions of sale and all customers, users and specifiers, should ensure that they examine the Company's latest Product Literature.