

RHEOBUILD[®] 2000PF

Superplasticiser for high performance concrete and as a dispersing agent for RHEOCEM[®] microcements for ground injection

Product description

RHEOBUILD[®] 2000PF is an admixture containing multifunctional, water soluble sulphonated polymers of various chemical composition, thus specifically affecting the different mineralogical components of cement.

When RHEOBUILD[®] 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 RHEOBUILD[®] 2000PF occurs even when Portland cement clinker is mixed with other materials (e.g. pozzolans, fly ash, slags & microsilica) in the production of blended cements.

Fields of application

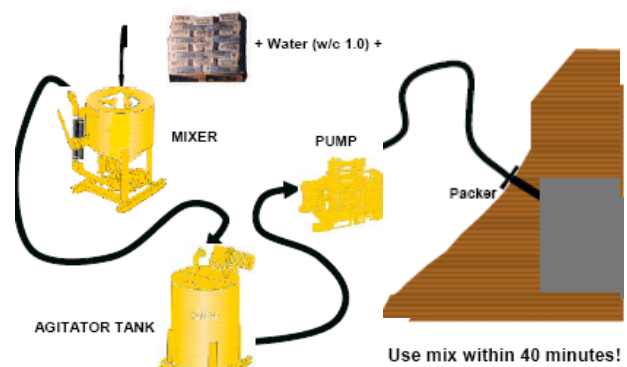
RHEOBUILD[®] 2000PF is designed for use in the manufacture of high quality concrete, such as:

- 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
- For dispersing RHEOCEM[®] microcements for injection applications
- Underwater concrete
- Structural concrete where early strengths are required

Cement Injection

RHEOBUILD[®] 2000PF has been found to be particularly beneficial in dispersing the RHEOCEM[®] microcements to allow enhanced penetration properties. In these applications RHEOBUILD[®] 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.

RHEOCEM[®] micro cement injection



Features and benefits

- Provides for 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)

RHEOBUILD[®] 2000PF

*Technical data

Form	liquid
Colour	brown
Density (at 20°C)	1.23–1.25 kg/litre
pH	7–9
Solubility in water	Total
Physiological effect	non-irritant

Packaging

RHEOBUILD[®] 2000PF is available in 208 litre drums and 1000 litre bulk containers. The product should be stored above 5°C. If it becomes frozen, thaw and agitate until completely reconstituted.

Application procedure

Dosage

RHEOBUILD[®] 2000PF is generally dosed at 1.5 – 2.0 litre per 100 kg of cement. Other dosages may be recommended in special cases according to specific job requirements. Consult your local UGC representative for advice.

Mixing

- Fill the mixer with water.
- Add cement. Mix for 2 minutes.
- Add RHEOBUILD[®] 2000PF and mix for another minute.
- Transfer to agitator.

It is very important to use an efficient mixer.

Colloidal mixers give the best result.

Minimum rpm. for colloidal mixers 1500 rpm.

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

Compatibility

RHEOBUILD[®] 2000PF is compatible with all types of Portland, Pozzolanic and Slag cements. As a general rule, RHEOBUILD[®] 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 RHEOBUILD[®] 2000PF before addition.

Safety precautions

RHEOBUILD[®] 2000PF contains no hazardous substances that require labelling. For further information refer to the Material Safety Data Sheet.

08/2009 BASF_CC-UAE revised 05/2010

www.meyco.basf.com

* Properties listed are based on laboratory controlled tests.

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

As all BASF technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.
