

MasterRheobuild[®] RMC 80

High range water reducing / superplasticising concrete admixture

MATERIAL DESCRIPTION

MasterRheobuild RMC 80 is a high range, high performance superplasticiser and water reducing agent specifically designed for the production of rheoplastic concrete required for piling etc. **MasterRheobuild RMC 80** disperses and deflocculates cement particles thereby increasing the workability and flowability of the concrete mixes.

A multi-component admixture based upon high molecular weight polymers and refined lignosulphonates.

FIELDS OF APPLICATION

For all piling applications including C.F.A. For the production of flowing concrete. To increase workability. For hot weather concreting. For controlled delays to initial and final setting of concrete mixes.

FEATURES AND BENEFITS

MasterRheobuild RMC 80 is recommended for use wherever the following situations are encountered:

For piling concrete.

Concrete containing pozzolanic materials.

In areas of congested reinforcement where high workability and cohesion are of benefit.

Effective over high range of cement contents and types.

Improves pumpability, durability and impermeability.

Extended slump retention time - maintains workability in excess of concrete produced utilising conventional superplasticisers

Reduces placing problems in hot weather by improved workability retention in conjunction with controlled setting times.

TYPICAL PROPERTIES*

Properties listed are for guidance and are not a guarantee of performance.

Appearance	Dark brown liquid
Specific gravity	1.21 at 25°C
Chloride content	"chloride-free" to EN 934-2

DOSAGE

Field trials should be conducted to determine the optimum addition rates of **MasterRheobuild RMC 80**. The following figures should be utilised as a starting point for these trials.

ACTION

MasterRheobuild RMC 80 acts on the cement particles by its powerful deflocculating and sequestering action to retard and maximise the hydration of the cement paste. Its powerful plasticising action results in high workability concrete which is responsive and cohesive. This action enables concrete with low or reduced water contents to be produced.

PACKAGING

MasterRheobuild RMC 80 is available in bulk or in 210 litre drums.

STANDARD

EN 934-2 Tables 2, 10, 11.1 and 11.2

ASTM C-494 Types D and G

BS 5075: Part 1. Retarding / Superplasticising (superseded by EN 934-2)

MIXING

MasterRheobuild RMC 80 should be added to the concrete mix during the mixing cycle at the same time as the water. Never add **MasterRheobuild RMC 80** to the dry cement. Alternatively, when using **MasterRheobuild RMC 80** to produce flowing concrete at site using transit mixer trucks, it can be added to the concrete via the feed hopper at the rear of the truck. Ensure at least 5 minutes mixing before discharge - minimum drum revolution of 10 rpm - to produce a fully homogenous mix.

FLOWING CONCRETE

An addition rate of 600 to 800ml per 100kg cement is usually required to produce flowing concrete from a concrete with an initial slump in the range of 50-70mm.

HIGH STRENGTH, HIGH WORKABILITY CONCRETE

Using **MasterRheobuild RMC 80** at 750 - 1000ml per 100kg, concrete mixes can be produced with a reduction in water in the region of 10 to 15% and an increase in workability of between 100 to 150%.

COMPATIBILITY

MasterRheobuild RMC 80 can be used with all types of Portland cement including Sulphate Resisting and modified cement (Type II). For use with special cements, contact Master Builders Solutions Technical Services Department.

MasterRheobuild RMC 80 should not be premixed with other admixtures. If other admixtures are to be used in the concrete containing **MasterRheobuild RMC 80**, they must be dispensed separately.

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EFFECT OF HIGH DOSAGE

A severe over dosage of **MasterRheobuild RMC 80** will result in the following:

- Retardation of initial and final set.
- Increase in air entrainment.

Increase in workability.

Providing it is properly cured, the ultimate strength of the concrete will not be adversely affected and will generally be higher than for normal concrete. The effect of over dosage will be exaggerated with SRC cement.

STORAGE

Store under cover, out of direct sunlight and protect from extremes of temperature. Shelf life is up to 24 months when stored as above. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult Master Builders Solutions Technical Services Department.

HANDLING AND TRANSPORTATION

No special requirements must be observed during use. Protection gloves and glasses are however recommended. **MasterRheobuild 850** is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

SAFETY PRECAUTIONS

MasterRheobuild RMC 80 contains no hazardous substances requiring labelling. For further information, refer to material safety data sheet.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local MBS representative.

MBS reserves the right to have the true cause of any difficulty determined by accepted test methods.

* Properties listed are based on laboratory controlled tests.

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QUALITY AND RESPONSIBLE CARE

All products originating from MB Construction Chemicals Solutions 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.

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DISCLAIMER

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