

MasterRheobuild 1100 PX

A high range water reducing superplasticiser admixture for the production of high slump concrete

MATERIAL DESCRIPTION

The basic component of **MasterRheobuild 1100 PX** powder is synthetic polymers. These polymers will allow mixing water to be reduced considerably and concrete strength to be enhanced significantly, particularly at early ages. **MasterRheobuild 1100 PX** powder is a chloride free product.

MasterRheobuild 1100 PX powder has to be dissolved in water to produce **MasterRheobuild 1100 PX** liquid prior to use.

PRIMARY USES

- Production of high slump concrete
- Precast concrete
- Low water cement ratio concrete
- In complicated formwork or with congested reinforcement
- Improving strengths in manufactured concrete products
- Re-tempering of concrete at site

ADVANTAGES

MasterRheobuild 1100 PX liquid allows the production of high slump flowable concrete, with a low water/cement ratio.

Concrete with **MasterRheobuild 1100 PX** liquid shows strengths higher than concrete without admixture having the same workability. The increase in strength, especially evident at early ages remains at later ages, both in air cured and steam cured processes.

Initial and final sets do not change significantly with respect to concrete without admixture. Therefore, whenever longer transport and finishing times are needed the use of a retarding Master Builders Solutions superplasticiser, or the use of **MasterRheobuild 1100 PX** liquid in conjunction with **MasterRoc HCA 10** should be considered.

COMPATIBILITY

MasterRheobuild 1100 PX liquid is compatible with all cements and admixtures meeting the ASTM standards.

The use of **MasterRheobuild 1100 PX** liquid and **MasterAir 100**, air-entraining agent is recommended whenever concrete is required to withstand freeze / thaw cycles.

DISSOLVING POWDER

MasterRheobuild 1100 PX powder in water:

Ensure that water is clean ideally potable and free of chlorides and other contaminants. To dissolve quantities in a small scale, use a clean, open top 200 litre container. The container should be made of plastic or stainless steel or coated steel.

To produce 200 litres of 40% solution, first pour 140 litres of water into a container and slowly add 100 kg of **MasterRheobuild 1100 PX** powder whilst stirring. If larger amounts are to be dissolved, the use of a mechanical slow speed stirrer is recommended.

Stir until the powder is fully dissolved. **MasterRheobuild 1100 PX** dissolves very rapidly, however if lumps do form continue stirring and reduce the speed of addition of the powder.

PACKAGING

MasterRheobuild 1100 PX is supplied in 25 kg bags.

STANDARDS

ASTM C494 Types A and F

DOSAGE

MasterRheobuild 1100 PX liquid is normally dispensed at a rate of 0.60 litres to 1.50 litres per 100 kg of cementitious material. Other dosages may be used, depending on the materials or conditions.

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DIRECTIONS FOR USE

MasterRheobuild 1100 PX powder must not be added directly to concrete.

MasterRheobuild 1100 PX liquid should be added to the mix with the gauging water. No extension in mixing time is necessary. Never add **MasterRheobuild 1100 PX** liquid to dry cement.

Alternatively, when using **MasterRheobuild 1100 PX** liquid to produce high slump flowing concrete at site (re-tempering) using ready mix trucks, it can be added to the concrete via the feed hopper at the rear of the truck. Mix before discharge for 3 minutes at 10rpm to produce a fully homogeneous mix.

When using **MasterRheobuild 1100 PX** liquid to obtain very high early strengths, advantage must be taken of the admixture water reducing properties.

EFFECTS OF OVER DOSAGE

A severe over dosage of **MasterRheobuild 1100 PX** liquid will result in the following:

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

STORAGE

MasterRheobuild 1100 PX powder should be stored off the ground, and away from moisture. Under these conditions the material will have a shelf life of 1 year. Master

MasterRheobuild 1100 PX liquid, should be stored in a closed container, drum or tank and used within 28 days of the **MasterRheobuild 1100 PX** powder being dissolved.

DISCLAIMER

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SAFETY PRECAUTIONS

As with all chemical products, care should be taken during use and storage to avoid contact with the eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

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.

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* Properties listed are based on laboratory controlled tests.