

MasterRheobuild® 1100AE

A high range water reducing superplasticising admixture for the production of rheoplastic concrete

DESCRIPTION

The basic components of **MasterRheobuild 1100AE** are synthetic polymers which allow mixing water to be reduced considerably and concrete strength to be enhanced significantly, particularly at early ages. **MasterRheobuild 1100AE** is a chloride free product.

PRIMARY USES

- Precast concrete.
- Low water/cement ratio concrete.
- In complicated formwork or with congested reinforcement.

ADVANTAGES

MasterRheobuild 1100AE allows the production of very flowable concrete, with a low water / cement ratio. Concrete with

MasterRheobuild 1100AE shows strengths higher than concrete without admixture having the same workability. The increase in strength, specially 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.

Due to the reduction in the water / cement ratio, all other properties of hardened concrete improve significantly, namely; lowered permeability, shrinkage and creep, increased workability and modulus of elasticity.

For more detailed information on the influence of superplasticisers on hardened concrete properties, consult your local BASF representative.

COMPATIBILITY

MasterRheobuild 1100AE is not compatible with **MasterGlenium** and **MasterPolyheed** superplasticizers.

MasterRheobuild 1100AE is compatible with **MasterPozzolith**, **MasterLife** and **MasterAir** admixtures.

MasterRheobuild 1100AE is compatible with all types of Portland Cement including SRC and is suitable for use in mixes containing:

- Microsilica (Silica Fume)
- Fly Ash (PFA)
- Ground Granulated Blast Furnace Slag (GGBS)

PACKAGING

MasterRheobuild 1100AE is available in bulk or 210 litre drums.

TYPICAL PROPERTIES*

Colour	Dark brown liquid
Specific gravity	1.250 +/- 0.03 at 25°C
Chloride content	"chloride-free" to EN 934
Freezing point	0°C

STANDARDS

EN 934-2 Tables 3.1 and 3.2
ASTM C-494 Types A and F
BS 5075 Part 1 & 3 (superseded by EN 934-2)

DOSAGE

MasterRheobuild 1100AE is normally dispensed at a rate of 0.8-1.5 litres per 100kg of cement. Subject to successful trials, other dosages may be used up to a rate of 3 litres per 100kg of cementitious material.

DIRECTIONS FOR USE

MasterRheobuild 1100AE should be added to the mix with the gauging water.

No extension to the mixing time is necessary. Never add **MasterRheobuild 1100AE** to dry cement.

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Alternatively, when using **MasterRheobuild 1100AE** to produce flowing concrete at site 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 homogenous mix.

When using **MasterRheobuild 1100AE** to obtain very high early strengths, advantage must be taken of its water reducing properties.

DISPENSING

MasterRheobuild 1100AE is introduced into the mixer together with mixing water. The plasticising effect or water reduction is higher if the admixture is added to the concrete after 50-70% of the mixing water has been added. The addition of **MasterRheobuild 1100AE** to dry aggregate or cement is not recommended.

STORAGE & SHELF LIFE

MasterRheobuild 1100AE should be stored in closed original container or bulk tank so as to protect from evaporation.

Shelf life is at least 2 years when stored as above.

SAFETY PRECAUTIONS

MasterRheobuild 1100AE contains no hazardous substances requiring labelling. For further information refer to the material safety data sheet.

NOTE

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

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

QUALITY AND CARE

All products originating from BASF's Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.

* Properties listed are based on laboratory controlled tests.

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STATEMENT OF RESPONSIBILITY

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NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by BASF either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not BASF, are responsible for carrying out procedures appropriate to a specific application.