

# MasterRheobuild<sup>®</sup> 875

High range, water-reducing, superplasticising admixture for the production of rheoplastic concrete

## DESCRIPTION OF PRODUCT

The basic components of **MasterRheobuild 875** are synthetic polymers, which allow mixing water to be reduced considerably and concrete strength to be enhanced significantly, particularly at early ages. **MasterRheobuild 875** is a chloride-free product.

## PRIMARY USES

- Production of rheoplastic self-compacting concrete
- Pre-cast concrete
- Low w/c ratio concrete
- In complicated formwork or with congested reinforcement

## ADVANTAGES

**MasterRheobuild 875** allows the production of very flowable concrete, with a low w/c ratio. Concrete with **MasterRheobuild 875** 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.

Due to the reduction in the w/c 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 Master Builders Solutions representative.

## COMPATIBILITY

**MasterRheobuild 875** is compatible with all cements and admixtures meeting ASTM standards.

The use of **MasterRheobuild 875** and **MasterAir 111** air-entraining agent is recommended whenever concrete is required to withstand freeze/thaw cycling.

## PACKAGING

**MasterRheobuild 875** is available in bulk or 210ltr drums.

## TYPICAL PROPERTIES

Colour: Dark brown liquid
Specific gravity: 1.165- 1.185 at 25°C
Air-entrainment:Maximum 1%
Chloride content: Nil to BS 5075
Nitrate content:Nil
pH: 5-7
Freezing point:0°C; can be reconstituted if stirred after thawing

## STANDARDS

ASTM C-494 Types A and F  
BS 5075 Part 1 and 3

## DOSAGE

**MasterRheobuild 875** is normally dispensed depending on the desired plasticising or water-reducing effect at a rate of 0.2-2.0ltr/100kg of cement .

Other dosages may be used, depending on the materials and conditions.

## DIRECTIONS FOR USE

**MasterRheobuild 875** should be added to the mix with the gauging water.

No extension to mixing time is necessary. Never add **MasterRheobuild 875** to dry cement. Alternatively, when using **MasterRheobuild 875** 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 875** to obtain very high early strengths, advantage must be taken of its water-reducing properties.

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## EFFECTS OF OVER DOSAGE

A severe over dosage of **MasterRheobuild 875** will result in the following:

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

## DISPENSING

**MasterRheobuild 875** 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 875** to dry aggregate or cement is not recommended.

## STORAGE

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. For specific storage advice, consult Master Builders Solutions 's Technical Services Department.

## SHELF LIFE

Up to 24 months if stored according to manufacturer's instructions in unopened containers.

## SAFETY PRECAUTIONS

**MasterRheobuild 875** 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 Master Builders Solutions representative.

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

## QUALITY STATEMENT

All products manufactured by Master Builders Solutions Egypt, or imported from Master Builders Solutions affiliate companies world-wide, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 standards.

\* Properties listed are based on laboratory controlled tests.

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