

MasterRheobuild[®] 874

High range, water-reducing superplasticiser for rheoplastic concretes

DESCRIPTION OF PRODUCT

MasterRheobuild 874 is formulated from synthetic polymers specially designed to impart rheoplastic qualities to concrete.

A rheoplastic concrete is a fluid concrete, easily flowing, but at the same time free from segregation and bleeding having the same w/c ratio as that of a low slump concrete without admixture. **MasterRheobuild 874** is chloride-free.

ADVANTAGES

MasterRheobuild 874 considerably improves the properties of fresh and hardened concrete.

PRIMARY USES

- Microsilica concrete
- Mass concrete pours
- Ready-mixed concrete
- Long-distance transport
- Pumped concrete
- Casting in hot climates

TO OBTAIN:

- Reduced thermal peaks
- High workability for longer periods
- Lower pumping pressure
- Delayed setting with longer workability
- Higher ultimate strengths
- Reduced permeability
- Improved durability

COMPATIBILITY

MasterRheobuild 874 is compatible with all cements and most air-entraining agents meeting the ASTM standards. The addition of

MasterRheobuild 874 and **MasterAir 111** (air-entraining agent) to concrete is recommended where it is required to withstand freezing and thawing cycles.

PACKAGING

MasterRheobuild 874 is available in, 1000ltr bulk.

TYPICAL PROPERTIES

Colour: Dark brown liquid

Specific gravity: 1.180-1.210 at 25°C

Air-entrainment: Maximum 1%

Chloride content: Nil to BS 5075

pH: 5-7

Nitrate content: Nil

Freezing point: 0°C; can be reconstituted if stirred after thawing

STANDARDS

ASTM C-494 Type B, D and G
BS 5075 Part 1 and 3

DOSAGE

Optimum dosage of **MasterRheobuild 874** should be determined in trial mixes. As a guide, the following dosages are recommended as a starting point for any trial: In normal concrete, a dosage of between 0.6-2.00 ltr/100kg of cement.

In high performance microsilica concrete a dosage of between 1.5-3ltr/100kg of cement. Dependent upon mix requirement, it is possible to use a higher dosage of **MasterRheobuild 874** without causing any adverse effects upon the concrete. Please consult Master Builders Solutions 's Technical Services Department for further information.

DISPENSING

MasterRheobuild 874 is a ready-to-use liquid which is dispensed into the concrete together with the mixing water. The plasticising effect and water reduction are higher if the admixture is added to the concrete after 50 to 70% of the mixing water

has been added. The addition of **MasterRheobuild 874** to dry aggregate or cement is not recommended. Automatic dispensers are available.

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WORKABILITY

MasterRheobuild 874 ensures that rheoplastic concrete remains workable in excess 2 hours at +20°C.

Workability loss is dependent on temperature, the type of cement, the nature of aggregates, the method of transport and initial workability. It is strongly recommended that concrete should be properly cured, particularly in hot and dry climates.

STORAGE

MasterRheobuild 874 must be stored where temperatures do not drop below +5°C. If product has frozen, thaw and agitate until completely reconstituted. 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 874 is not a fire or health hazard. Spillages should be washed down immediately with cold water. 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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