

# MasterRheobuild<sup>®</sup> 857S

High range, water reducing superplasticiser for concretes containing GGBS and microsilica

## DESCRIPTION

**MasterRheobuild 857S** is formulated from synthetic polymers specially designed to impart rheoplastic qualities to concrete, particularly those containing GGBS or microsilica.

A rheoplastic concrete is a fluid concrete with a slump of at least 200 mm, easily flowing, but at the same time free from segregation and having the same water/cement ratio as that of a low slump concrete (25 mm) without admixture.

**MasterRheobuild 857S** is chloride free.

## TYPICAL APPLICATIONS

- Mixes containing GGBS or microsilica
- Mass concrete pours
- Ready mixed concrete
- Pumped concrete
- Casting in hot climates

To obtain:

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

## ADVANTAGES

**MasterRheobuild 857S** considerably improves the properties of fresh and hardened concrete

## PACKAGING

**MasterRheobuild 857S** is available in bulk or in 210 L drums.

## STANDARDS

EN 934-2 Tables 3.1, 3.2, 11.1 and 11.2  
ASTM C-494 Type A, B, D, F and G

## TYPICAL PROPERTIES\*

Colour	Dark brown liquid
Specific gravity @ 25°C	1.24
Chloride content	"chloride-free" to EN 934
Freezing point	0°C

## APPLICATION GUIDELINES

Optimum dosage **MasterRheobuild 857S** 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 0.8-2.0 L/100kg total cementitious material. In a high performance, low water cement ratio concrete, a dosage of between 1.5-2.5 L/100kg total cementitious material. Dependent upon mix requirement, it is possible to use a higher dosage of **MasterRheobuild 857S** without causing any adverse effects upon the concrete. Please consult Master Builders Solutions Construction Chemicals Technical staff for further information.

## MIXING

**MasterRheobuild 857S** has been specifically developed for use in concretes modified with ground granulated blast furnace slag but is compatible with all other cement types.

## DISPENSING

**MasterRheobuild 857S** 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 50-70% of the mixing water has been added. The addition of **MasterRheobuild 857S** to dry aggregate or cement is not recommended. Automatic dispensers are available.

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## WORKABILITY

**MasterRheobuild 857S** ensures that rheoplastic concrete remains workable in excess 3 hours at +20°C.

Workability loss is dependent on temperature, and on 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 AND SHELF LIFE

**MasterRheobuild 857S** must be stored where temperatures do not drop below +5°C. If the product has frozen thaw and agitate until completely reconstituted. Store under cover, out of direct sunlight and protect from extremes of temperature. The shelf life is 12 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.

## HEALTH AND SAFETY

**MasterRheobuild 857S** 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.

## QUALITY AND CARE

All products originating from Master Builders Solutions 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 and ISO 14001.

\* Properties listed are based on laboratory controlled tests.

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### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

### NOTE

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

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