

# MasterRheobuild<sup>®</sup> 857AD

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

## DESCRIPTION

**MasterRheobuild 857AD** 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 857AD** is chloride free.

## PRIMARY USES

- 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 857AD** considerably improves the properties of fresh and hardened concrete.

## PACKAGING

**MasterRheobuild 857AD** is available in bulk or in 210 litre drums.

## STANDARDS

ASTM C-494 Type A, B, D, F and G

## TYPICAL PROPERTIES\*

|                            |                       |
|----------------------------|-----------------------|
| Colour                     | Brown liquid          |
| Specific gravity typically | 1.230 at 25°C         |
| Chloride content           | Nil to BS 5075 Part 1 |
| Freezing point             | 0°C                   |
| Flashpoint                 | N/A                   |

## APPLICATION GUIDELINES

### DOSAGE

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

### COMPATIBILITY

**MasterRheobuild 857AD** 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 857AD** 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 857AD** to dry aggregate or cement is not recommended. Automatic dispensers are available.

# MasterRheobuild<sup>®</sup> 857AD

## WORKABILITY

**MasterRheobuild 857AD** 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

**MasterRheobuild 857AD** 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.

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 857AD** 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.

® = Registered trademark of the MBCC Group in many countries.

MBS\_CC-UAE/Rh\_857AD\_03\_07/v1/12\_13

### 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.

**Master Builders Solutions**  
Construction Chemicals LLC  
P.O. Box 37127, Dubai, UAE  
Tel: +971 4 8090800  
[www.master-builders-solutions.com/en-ae](http://www.master-builders-solutions.com/en-ae)

**Disclaimer:** the TUV mark relates to certified management system and not to the product mentioned on this datasheet



A brand of  
**MBCC GROUP**