

# MasterRheobuild® 856KE

## High range, water reducing superplasticiser for concretes containing GGBS

### MATERIAL DESCRIPTION

**MasterRheobuild 856KE** is a ready-to-use, high range water-reducing admixture designed to produce high slump concrete with workability retaining properties. The product is chloride free.

### FIELDS OF APPLICATION

**MasterRheobuild 856KE** considerably improves the properties of fresh and hardened concrete.

### FEATURES AND BENEFITS

Used in

- Microsilica concrete or GGBS
- 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

### TYPICAL PROPERTIES\*

Properties listed are for guidance and are not a guarantee of performance.

Appearance	Dark brown liquid
Specific gravity	1.24 at 25°C
Chloride content	"chloride-free" to EN 934-2

### DOSAGE

Optimum dosage of **MasterRheobuild 856KE** 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 0.8-1.6 litre / 100kg total cementitious material. In a high performance, low water cement ratio concrete, a dosage of between 1.4-2.2 litre / 100kg total cementitious material. Dependent upon mix requirement, it is possible to use a higher dosage of **MasterRheobuild 856KE**

without causing any adverse effects upon the concrete. Please consult MBS Construction Chemicals Technical staff for further information.

### COMPATIBILITIES

**MasterRheobuild 856KE** has been specifically developed for use in concretes modified with ground granulated blast furnace slag, but is compatible with all other cement types and cementitious materials such as Micro Silica (Silica Fume) and Fly Ash (PFA).

### PACKAGING

**MasterRheobuild 856KE** is available in bulk or in 210 litre drums.

### STANDARD

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

### MIXING

**MasterRheobuild 856KE** 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 856KE** to dry aggregate or cement is not recommended. Automatic dispensers are available.

**MasterRheobuild 856KE** 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 856KE** 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 MBS's Technical Services Department.

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### HANDLING AND TRANSPORTATION

No special requirements must be observed during use. Protection gloves and glasses are however recommended. **MasterRheobuild 856KE** is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

### SAFETY PRECAUTIONS

**MasterRheobuild 850** 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 MBS representative.

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

\* Properties listed are based on laboratory controlled tests.

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

### QUALITY AND RESPONSIBLE CARE

All products originating from MB Construction Chemicals Solutions are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, environmental and occupational health and safety standards.

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### DISCLAIMER

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