

# MasterRheobuild® 857

## High range water reducing superplasticiser

### DESCRIPTION

**MasterRheobuild 857** is formulated from synthetic polymers specially designed to impart rheoplastic qualities to concrete.

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

### PACKAGING

**MasterRheobuild 857** is available in bulk or in 210 litre 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	1.235
Chloride content	"chloride-free" to EN 934
Freezing point	0°C

### APPLICATION GUIDELINES

Optimum dosage **MasterRheobuild 857** 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 857** without causing any adverse effects upon the concrete. Please consult BASF Construction Chemicals Technical staff for further information.

### MIXING

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

**MasterRheobuild 857** 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.

**MasterRheobuild 857** is suitable for concrete mixes containing all types of portland cement and cementitious materials such as:

- Microsilica (Silica Fume)
- Fly Ash (PFA)
- GGBS (ground granulated blast furnace slag)



We create chemistry

# MasterRheobuild® 857

## STORAGE AND SHELF LIFE

**MasterRheobuild 857** 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.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Technical Services Department.

## HEALTH AND SAFETY

**MasterRheobuild 857** 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 BASF's 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, ISO 14001 and ISO 45001.

\* Properties listed are based on laboratory controlled tests.

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

BASF\_CC-UAE/Rh\_857\_09\_01/v2/01\_18/v3/08\_19

### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this BASF 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 BASF either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not BASF, are responsible for carrying out procedures appropriate to a specific application.

BASF Construction Chemicals UAE LLC  
P.O. Box 37127, Dubai, UAE  
Tel: +971 4 8090800, Fax: +971 4 8851002  
www.master-builders-solutions.basf.ae

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

