

RHEOBUILD® 857

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

Description

RHEOBUILD® 857 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 (25mm) without admixture. RHEOBUILD® 857 is chloride free.

Advantages

RHEOBUILD® 857 considerably improves the properties of fresh and hardened concrete.

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

Compatibility

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

Packaging

RHEOBUILD® 857 is available in bulk or in 210 litre drums.

*Typical properties

Colour:	Dark brown liquid
Specific gravity:	1.235 at 25°C
Chloride content:	"chloride-free" to EN 934-2
Freezing point:	0°C

Standards

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

Dosage

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

Dispensing

RHEOBUILD® 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 RHEOBUILD® 857 to dry aggregate or cement is not recommended. Automatic dispensers are available.

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Workability

RHEOBUILD[®] 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.

Storage

RHEOBUILD[®] 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.

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

Safety precautions

RHEOBUILD[®] 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.

Note

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF representative.

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

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 OHSAS 18001.

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* Properties listed are based on laboratory controlled tests.

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