

# RHEOBUILD<sup>®</sup> 870

## High range, water-reducing superplasticiser for rheoplastic concretes

### Description of Product

RHEOBUILD 870 is formulated from synthetic polymers specially designed to impart rheoplastic qualities to concrete.

A rheoplastic concrete is a fluid concrete, easily flowing, but at the same time free from segregation and bleeding having the same w/c ratio as that of a low slump concrete without admixture with a slight set retarding effect for producing free-flowing concrete in hot climates. Also, it provides a substantial water reduction effect for promoting high, early and ultimate strengths.

RHEOBUILD 870 is chloride-free.

### Advantages

RHEOBUILD 870 considerably improves the properties of fresh and hardened concrete.

### Primary Uses

- Microsilica concrete
- 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

### Compatibility

RHEOBUILD 870 is compatible with all cements and most air-entraining agents meeting the ASTM standards. The addition of RHEOBUILD 870 and MICRO-AIR 111 (air-entraining agent) to

concrete is recommended where it is required to withstand freezing and thawing cycles.

### Packaging

RHEOBUILD 870 is available in 210ltr drums or 1000ltr bulk.

### Standards

ASTM C 494 Type D and G BS 5075 Part 3

### Dosage

Optimum dosage of RHEOBUILD 870 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 0.5% and 1.5%.

Please consult BASF's Technical Services Department for further information.

### Dispensing

RHEOBUILD 870 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 RHEOBUILD 870 to dry aggregate or cement is not recommended. Automatic dispensers are available.

### Workability

RHEOBUILD 870 ensures that rheoplastic concrete remains workable in excess 2 hours at +20°C.



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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 870 must be stored where temperatures do not drop below +5°C. If 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.

## Shelf Life

Up to 24 months if stored according to manufacturer's instructions in unopened containers.

## Safety Precautions

RHEOBUILD 870 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 Statement

All products manufactured by BASF Egypt, or imported from BASF affiliate companies worldwide, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2000, ISO 14001:2004 & OHSAS 18001:1999 standards.

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

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