

# RHEOBUILD<sup>®</sup> 561E

## High range, water-reducing, superplasticising admixture for the production of rheoplastic concrete

### Description of Product

RHEOBUILD 561E 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 200mm, easily flowing, but at the same time free from segregation and having the same w/c ratio as that of a low slump concrete (25mm) without admixture.

RHEOBUILD 561E is a chloride-free product.

### Advantages

RHEOBUILD 561E 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 561E is compatible with all cements and admixtures meeting ASTM standards.

The use of RHEOBUILD 561E and MICRO-AIR 111, air-entraining agent, is recommended whenever concrete is required to withstand freeze/thaw cycling.

### Packaging

RHEOBUILD 561E is available in bulk or 210ltr drums.

### Typical Properties

Colour:	Brown free-flowing liquid
Specific gravity:	1.167 +/- 0.005 at 24°C
Air-entrainment:	Maximum 1%
Chloride content:	Nil to BS 5075
Nitrate content:	Nil
Freezing point:	0°C; can be reconstituted if stirred after thawing

### Standards

ASTM C494 Types B, D and G  
BS 5075 Part 1 and 3

### Dosage

RHEOBUILD 561E is normally dispensed, depending on the desired plasticising or water-reducing effect, at a rate of 0.2-1.8ltr/100kg of cement.

Other dosages may be used, depending on the materials and conditions. Trials should be conducted to obtain optimum dosage.

### Directions for Use

RHEOBUILD 561E should be added to the mix with the gauging water.

No extension to mixing time is necessary. Never add RHEOBUILD 561E to dry cement.

Alternatively, when using RHEOBUILD 561E to produce flowing concrete at site using ready-mix trucks, it can be added to the concrete via the feed hopper at the rear of the truck. Mix before discharge for 3 minutes at 10rpm to produce a fully homogenous mix.

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When using RHEOBUILD 561E to obtain very high early strengths, advantage must be taken of its water-reducing properties.

## Effects of Over Dosage

A severe over-dosage of RHEOBUILD 561E will result in the following:

- Retardation of initial and final set
- Slight increase in air-entrainment
- Increase in workability

## Dispensing

RHEOBUILD 561E is introduced into the mixer together with mixing water. The plasticising effect or water reduction is higher if the admixture is added to the concrete after 50-70% of mixing water has been added. The addition of RHEOBUILD 561E to dry aggregate or cement is not recommended.

## Storage

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 561E contains no hazardous substances requiring labelling. 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 method.

## 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.