

# RHEOMAC<sup>®</sup> 707M

## Low dosage, liquid, integral waterproofer

### Description of Product

A liquid admixture to give high water resistance, based upon a blend of specially selected surface active agents and refined lignosulphonate. Waterproof concrete is the result of good concrete practice coupled with the lowest w/c ratio compatible with achieving full compaction. The use of RHEOMAC 707M enables all these criteria to be met due to its strong plasticising and water-reducing properties.

### Primary Uses

RHEOMAC 707M should be used in all structural concrete that is constantly or intermittently in contact with water, such as sea walls, tunnels, basements, structural and pre-cast concrete in exposed superstructures.

### Benefits

- Concrete containing RHEOMAC 707M is resistant to water penetration either under conditions of hydrostatic pressure or capillary absorption
- Durability is increased due to significant reduction in w/c ratio
- Sulphate attack is reduced due to the sulphate bearing ground water being resisted
- The cohesive properties of the concrete are improved, thus reducing segregation and bleeding
- Concrete of similar workability to a control mix produced with RHEOMAC 707M is easier to place
- Pumpability of concrete is greatly improved
- Surface finish of concrete is improved

### Standards

ASTM C-494 Type A and D

### Packaging

RHEOMAC 707M is supplied in 25ltr pails, 210ltr drums and 1000ltr bulk.

### Action

RHEOMAC 707M assists in the production of water-resistant concrete by its two-fold action:

1. It significantly reduces water demand to enable production of good workability concrete with a minimum w/c ratio.
2. It disturbs the cellular network within the concrete mass (capillaries) that are normally inter-connected, thereby reducing the concrete permeability.

### Typical Properties

Colour	Brown liquid
Specific gravity	1.08–1.1 at 25°C
Air-entrainment:	2 ± 1% according to grading of sand and water content
Chloride content	Nil to BS 5075
Nitrate content	Nil

### Dosage

0.5% by weight of cement. Field trials should be conducted to determine the effect of RHEOMAC 707M on the workability of the concrete.

### Dispensing

RHEOMAC 707M should be added with the mixing water, preferably via a dispenser. No extension to normal mixing time is necessary. RHEOMAC 707M should never be added to dry cement.

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## Points to remember when producing waterproof concrete

- Ensure specified w/c ratio is not exceeded; work within the range of 0.4 to 0.6
- Keep water content as low as possible, compatible with achieving full compaction
- Place concrete quickly, and ensure it is thoroughly compacted
- Protect new concrete against rapid drying out, and ensure adequate and complete curing with BASF's MASTERKURE curing compounds

## Effects of Over Dosage

- A severe over dosage of RHEOMAC 707M will result in the following:
- Slight set in reterdation (No effect on striking times)
- Slight increase in air content
- Increase in workability

## Special Features

Advantage of RHEOMAC 707M's strong plasticising action must be taken to reduce water content to a minimum. A reduction in w/c ratio in the range of 10-15% can generally be achieved.

## Storage

RHEOMAC 707M must be stored in a place where temperature does 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

RHEOMAC 707M is not a fire or health hazard. Spillages should be washed down immediately with cold water. For further information, refer to 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.