

# MasterPozzolith<sup>®</sup> RMC 4

## High performance retarding plasticiser for concrete

### DESCRIPTION

**MasterPozzolith RMC 4** is a high performance plasticising retarder, beneficial in maintaining workability especially in high ambient temperatures.

### PRIMARY USES

- Of particular value for readymixed concrete where high workability retention and retardation are of prime importance.
- Hot weather concreting of all types.
- Reduction in permeability, reducing effect of groundwater salts on concrete and steel.
- To improve cohesion, workability and compactability in concretes using poorly graded/shaped fine aggregates.

### TYPICAL APPLICATIONS

In hot weather concreting where delays to initial and final set are important and where maximum slump retention is of concern - such as site batched, pre-cast, and readymixed concretes.

### ADVANTAGES

- Considerably improves the cohesion of concrete, reducing segregation and bleed water.
- Of particular use where fine aggregates of poor grading and particle shape are evident.
- Reduces placing problems in hot weather by improved workability and workability retention in conjunction with extended setting times.
- Improved surface finish.
- Improved trowellability.
- Reduces honeycombing / cold joint effects.
- Improves pumpability of concrete.
- Reduces effects of various modes of attack on concrete and embedded steel by considerable reduction in permeability.

### COMPATIBILITY

**MasterPozzolith RMC 4** can be used with all types of Portland cement including Sulphate Resisting. For use with other special cements, contact BASF's Technical Services Department.

**MasterPozzolith RMC 4** should not be pre-mixed with other admixtures. If other admixtures are to be used in concrete containing **MasterPozzolith RMC 4**, they must be dispensed separately.

### PACKAGING

**MasterPozzolith RMC 4** is available in bulk or in 210 litre drums.

### ACTION

**MasterPozzolith RMC 4** acts efficiently on cement particles by combining the effects of a powerful plasticising / deflocculating agent and retarder.

### TYPICAL PROPERTIES\*

Colour	Dark brown liquid
Specific gravity	1.200 @ 25°C
Chloride content	"chloride free" to EN 934
Freezing point	0°C

### STANDARDS

EN 934-2 Tables 2 and 10  
ASTM C-494: Types A, B and D  
BS 5075: Part 1 (superseded by EN 934-2)

### DIRECTIONS FOR USE

Optimum performance is achieved when the admixture is added to the mixing water. Never add **MasterPozzolith RMC 4** to the dry cement. No extension to normal mixing time is necessary.

### DOSAGE

Trials should be conducted to determine the optimum addition rates of **MasterPozzolith RMC 4**, depending on mix design proposed and mix performance requirements. As a general guide to these trials, a dosage range of 200ml to 560ml per 100kg cement is recommended as a starting point. Depending on the desired properties, a dosage of up to 1000ml per 100kg of cement can be used.

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## EFFECTS OF OVER DOSAGE

A severe over-dosage of **MasterPozzolith RMC 4** will result in the following:

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

Providing it is properly cured, the ultimate strength of the concrete will not be adversely affected and will generally be higher than for normal concrete. The retarding effects of very high dosages will be exaggerated with SR cement.

## DISPENSING

**MasterPozzolith RMC 4** should be dispensed through a proprietary dispenser, such as is available from BASF.

## SETTING TIMES

**MasterPozzolith RMC 4** acts efficiently to give controlled retardation of initial set. Setting times of concrete mixes are related to cement type and ambient temperatures.

## SPECIFICATION CLAUSE

**MasterPozzolith RMC 4**, a retarding and plasticising concrete admixture manufactured by BASF, or similar approved, to the following specification:

**MasterPozzolith RMC 4** is to be used in all concrete (indicate) at a dosage range of 200ml to 560ml per 100kg of cement in accordance with the manufacturer's instructions.

Specific gravity  $1.178 \pm 0.005$

Complying to specification type:

ASTM C-494 Types B and D or BS 5075 Part 1.

Composition: High molecular weight refined lignosulphonates and synthetic retarders.

## STORAGE

Store under cover, out of direct sunlight and protect from extremes of temperature. Shelf life is up to 2 years when stored as above. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult MBCC's Technical Services Department.

## SAFETY PRECAUTIONS

**MasterPozzolith RMC 4** 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 Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local MBCC representative.

## NOTE

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

## QUALITY AND CARE

All products originating from MBCC'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.

\* Properties listed are based on laboratory controlled tests.

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

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## STATEMENT OF RESPONSIBILITY

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