

# MasterPozzolith<sup>®</sup> 40LD

## Water-reducing, plasticiser / retarder for concrete

### DESCRIPTION

**MasterPozzolith 40LD** is a versatile product which can be utilised to maintain workability and effect water reduction throughout a range of concrete mix designs and ambient temperature conditions.

**MasterPozzolith 40LD** is a multi-role admixture capable of functioning as a water reducer to enable strength gains, whilst maintaining workability or set retardation.

### PRIMARY USES

- Hot weather concreting.
- To increase workability.
- To increase compressive strength.
- To reduce permeability.

### TYPICAL APPLICATIONS

**MasterPozzolith 40LD** is used wherever effective workability retention and maximum strengths are required such as:

- Hot weather concreting where controlled delays to initial set are beneficial.
- Readymix concrete where workability retention coupled with retardation of initial set are beneficial.
- In areas of congested reinforcement where high workability is of benefit.
- Above or below ground waterproofing where maximum impermeability and watertightness are essential.
- Use in combination with superplasticizers to extend concrete working life to over 2 hours.

### ADVANTAGES

- Reduces placing problems in hot weather concreting by improving workability and workability retention.
- Increases impermeability and durability
- Higher early and ultimate strengths
- Effective over wide range of cement contents
- Improves surface finish, pumpability and trowelling
- Enables significant economies in mix designs to be achieved, thereby saving cement

### ACTION

**MasterPozzolith 40LD** acts efficiently on the cement particles by combining the effects of powerful plasticising and deflocculating agents. It considerably improves the workability of concrete mixes without the addition of extra water. The improved dispersal of the cement particles ensures the process of hydration proceeds under optimum conditions.

### PACKAGING

**MasterPozzolith 40LD** is available in 210 litre drums. Bulk deliveries available on request.

### STANDARDS

EN 934-2 Tables 2, 10, 11.1 and 11.2  
ASTM C-494: Types A, B, D and G  
BS 5075: Part 1 (superseded by EN 934-2)

### TYPICAL PROPERTIES\*

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

### APPLICATION GUIDELINES

**MasterPozzolith 40LD** should be added to the mix with the gauging water after sand, cement, and aggregate have been blended. Alternatively, **MasterPozzolith 40LD** can be dispensed after the water has been added to the blended cement and aggregates.

### COMPATIBILITY

**MasterPozzolith 40LD** can be used with all types of Portland cement including Sulphate Resisting and modified cement (Type II). For use with special cements, contact Master Builders Solutions Technical Services Department.

**MasterPozzolith 40LD** should not be mixed with other admixtures. If other admixtures are to be used in concrete containing

**MasterPozzolith 40LD**, they must be dispensed separately. Consult Master Builders Solutions Technical Services Department for advice.

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## SETTING

**MasterPozzolith 40LD** acts efficiently to give controlled retardation of initial set. Setting times of concrete mixes are related to cement type and ambient temperature.

## DOSAGE

The normal dosage range is 400ml to 1200ml per 100kg of cement. Higher dosages may be required when certain combinations of materials and conditions are present.

In all cases we recommend trial mixes are carried out to determine the correct levels of admixture required to achieve the desired concrete properties.

## EFFECTS OF OVER DOSAGE

A severe over dosage of **MasterPozzolith 40LD** 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 40LD** should be dispensed through a proprietary dispenser, such as is available from Master Builders Solutions. Details available on request.

## STORAGE AND SHELF LIFE

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 advices consult Master Builders Solutions Technical Services Dept.

## HEALTH AND SAFETY

**MasterPozzolith 40LD** 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.

## QUALITY AND CARE

All products originating from Master Builders Solutions 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 and ISO 14001.

\* 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 Master Builders Solutions 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 Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

