

# MasterCast 222

## **Powder Mortar Plasticiser**

#### **MATERIAL DESCRIPTION**

**MasterCast 222** is a mortar plasticiser in powder form for use as an alternative to lime or as a supplement to lime to aid mortar durability. Complies with EN934/3.

#### **APPLICATIONS**

For use as an admixture for mortars to improve workability, in both bricklaying and rendering applications.

**MasterCast 222** aids resistance of mortar to frost attack in both wet and cured state; also increases long term durability of both cement, sand and cement, lime, sand mortars (refer to BS 5628).

#### BENEFITS

- Economical
- Reduced labour costs
- Reduced wastage
- · Increased spread rates
- · Helps reduce efflorescence
- · Reduces bleed and segregation in the mix
- · Improved bond
- Improves frost resistance
- Reduces s hrinkage

#### PACKAGING

Available in 20gm sachets (150x sachets per box).

## **TECHNICAL DATA/TYPICAL PROPERTIES\***

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

Colour	Brown powder
Chloride Ion Content	<0.1% (w/w) of admixture

**MasterCast 222** will entrain microscopic air bubbles into cement mortars in a controlled manner as specified in EN934.

Air entrained mixes produce greatly enhanced working properties with a reduced demand for mixing water. **MasterCast 222** also improves frost resistance in both freshly laid and hardened mortars, as the microscopic air bubbles entrained provide space for expansion of water due to freezing.

#### **APPLICATION PROCEDURE**

**MasterCast 222** may be added directly into the mixing drum after the addition of sand or premixed with the gauging water. The use of **MasterCast 222** pre-weighed sachets introduced directly to the mix optimises control of dosage and minimises wastage.

#### WATERPROOFING AND TANKING

Basements lift pits, inspection pits, water towers, liquid tanks, effluent tanks and swimming pools.

#### **OTHER TYPICAL APPLICATION**

Bedding tiles, fixing or re-fixing slip bricks and bonding new concrete to old.

#### **MIXING**

The action of **MasterCast 222** is entirely physical and therefore requires an efficient mixing action. If mixing is to take place by hand the mix must be well "turned over" to achieve the maximum plasticising effect. Mortar selection should be made in line with the relevant National Standards and Codes of Practice.

The table below gives indicative mix designs relative to uses with and without **MasterCast 222**.

Cement Sand & MasterCast 222	Cement Lime Sand	Typical Uses
1:3	1:1 / 4:3	Laying load-bearing brick work
1:4	1:0.5:4.5	External rendering (exposed positions). Backing and bedding coats (rough cast).
1:6	1:1:6	Internal plaster floating coats. External
1:3 to 1:6	Varies	Brickwork, pointing or re- pointing.
1:8	1:2:9	Laying blocks and concrete or sand-lime bricks.

Portland cement: Lime, sand mixes which also include an air entraining plasticiser have been shown to be particularly durable in accelerated testing.



# MasterCast 222

## **Powder Mortar Plasticiser**

#### DOSAGE

**MasterCast 222** is added at the rate of 30-60 gm per 100kg of cement. Always use the type of sand recommended for a particular application. Test mixes should be carried out to determine optimum dosage.

#### STORAGE AND SHELF LIFE

Store in cool dry conditions. Minimum 1 year when stored in accordance with the manufacturer's instructions.

## WATCH POINTS

**MasterCast 222** provides protection from frost down to -2°C in the wet mortar. Normal winter working precautions must be taken.

## NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

MB Construction Chemicals Solutions South Africa (Pty) Ltd reserves the right to have the true cause of any difficulty determined by accepted test methods. Undertaking such tests is not, and shall not be deemed to be, an admission of liability or an assumption of any risk, loss, damage or liability.

## **QUALITY AND RESPONSIBLE CARE**

All products originating from MB Construction Chemicals Solutions South Africa (Pty) Ltd are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, environmental and occupational health and safety standards.

\* Properties listed are based on laboratory controlled tests.

#### **DISCLAIMER**

The technical information and application advice given in this MB Construction Chemicals Solutions South Africa (Pty) Ltd 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.