



The Chemical Company

FEBMIX[®] PLUS

Liquid mortar plasticizer

Description

FEBMIX[®] PLUS is a liquid ultra stable 'micro' air entraining mortar plasticiser, designed to enhance the workability and freeze / thaw resistance of brick and block laying mortars. FEBMIX[®] PLUS may be used to replace or supplement the use of lime, and is designed to cope with variations in cement and aggregate sources and quality.

Primary uses

FEBMIX[®] PLUS is an admixture for mortars that improves the workability of bricklaying and plastering mortars and increases their resistance to freeze / thaw cycles. FEBMIX[®] PLUS is particularly valuable in cold weather, for damp or exposed work, or when restricted site or safety conditions do not permit storage of lime.

Advantages

- Ultra stable bubble structure.
- Uniform air entrainment.
- Compatible with most types of Portland cement and difficult sands.
- Increased resistance to damage by freeze / thaw cycles.
- Reduced segregation and bleed.
- Greatly improved plasticity.
- Reduced permeability.
- Non corrosive to embedded metals.
- Easier and faster mortar spread.
- Fully compatible with mixes containing lime.
- Reduces incidence of efflorescence in mortar.
- Can be used to replace lime.

Compatibility

FEBMIX[®] PLUS can be used with other admixtures provided these are added separately

to the mix. It can be used for all types of Portland cement, including Sulphate Resisting. It can also be used in lime / sand mortars as a further precaution against frost.

Packaging

FEBMIX[®] PLUS is supplied in 20 litre containers.

Standards

FEBMIX[®] PLUS has been tested to comply with BS 4887 and ASTM C91.

Action

FEBMIX[®] PLUS replaces lime in the mix and reduces the amount of water required to achieve the required workability, thus reducing the possibility of drying shrinkage, which can result in cracking and crazing. Minute bubbles of air entrained in the hardened mortar provide space for the expansion of water when freezing occurs without disturbance to the body of the mortar.

Directions for use

FEBMIX[®] PLUS may be either pre-mixed with the water or added directly into the mix at the same time as the water.

Note: The superior plasticising qualities of FEBMIX[®] PLUS will result in a significant reduction in water demand of any given mix.

If hand mixing methods are used, a vigorous mixing action should be used to ensure efficient production of FEBMIX[®] PLUS 'micro' air entrainment properties.

FEBMIX[®] PLUS

Choice of relevant mix designs should be made in line with relevant British Standard Codes of Practice, Department of Environment Publications or relevant National Standards.

Cement : Sand + FEBMIX [®] PLUS	Cement: Lime: Sand:	Masonry Cement: Sand:	Typical Uses
1:3	1:¼:3	-	Laying load-bearing brickwork.
1:4½	1:½:4½	-	External rendering (exposed conditions). Backing and bedding coats (rough cast).
1:6	1:1:6	1:4½	Internal plaster floating coats. External rendering.
1:3 to 1:6	Varies	-	Brickwork, pointing or re-pointing.
1:8	1:2:9	1:6	Laying blocks and concrete or sand lime bricks.

The action of FEBMIX[®] PLUS is entirely physical. Used in accordance with instructions, it does not significantly affect the setting time or other properties of the mortar.

Watchpoints

FEBMIX[®] PLUS provides protection from frost down to -2°C in the wet mortar. Therefore, FEBMIX[®] PLUS should not be used at temperatures below -2°C or if the temperature is expected to drop below -2°C within 24 hours. Normal winter working precautions must be taken.

Dosage rate

FEBMIX[®] PLUS is added at the rate of 500 to 1000ml per 100kg of cement.

Effects of over dosage

Whilst it is undesirable to exceed this stated dosage, the self-controlling action of FEBMIX[®] PLUS limits the amount of air capable of being entrained, thus safeguarding against over dosage.

Specification clause

All mortar and renders where indicated shall contain FEBMIX[®] PLUS mortar plasticiser or similar approved. The plasticiser shall be based on synthetic or sustainable raw materials in an aqueous solution that provides stable and uniformly distributed air bubbles. The admixture shall comply with the requirements of BS 4887.

Storage

Store under cover, out of direct sunlight and protect from extremes of temperature.

Safety precautions

FEBMIX[®] PLUS contains no hazardous substances requiring labelling. For further information see Product Health and Safety Advice Sheet.

Quality and care

All products originating from BASF'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.

05/95 BASF_CC-UAE revised 05/2004

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

As all BASF technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.