BUILDING TRUST

PRODUCT DATA SHEET

SikaControl®-222 AER P

(formerly **MasterCast® 222**) Powder Mortar Plasticiser

DESCRIPTION

SikaControl®-222 AER P 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.

USES

For use as an admixture for mortars to improve workability, in both bricklaying and rendering applications. SikaControl®-222 AER P 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).

FEATURES

- 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 shrinkage

SikaControl®-222 AER P 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. SikaControl®-222 AER P 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.

PRODUCT INFORMATION

Packaging	Available in 200gm sachets
Appearance and colour	Brown powder
Shelf life	Minimum 1 year when stored in accordance with the manufacturer's instructions.
Storage conditions	Store in cool dry conditions.
Total chloride ion content	<0.1% (w/w) of admixture

TECHNICAL INFORMATION

Concreting guidance

WATERPROOFING AND TANKING APPLICATIONS
Basements lift pits, inspection pits, water towers, liquid tanks, effluent tanks and swimming pools.

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

Mortar mix design

MIXING
The action of SikaControl®-222 AER P 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 SikaControl®-222 AER P.

Cement Sand & **SikaControl-222 AER P**	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.

APPLICATION INFORMATION

Recommended dosage

SikaControl®-222 AER P 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.

Dispensing

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

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTATION

SikaControl®-222 AER P provides protection from frost down to -2°C in the wet mortar. Normal winter working precautions must be taken.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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