

# MASTERKURE<sup>®</sup> 111 CF

## Evaporation retardant and finishing aid

### Description

MASTERKURE 111 CF evaporation retardant helps produce high quality, concrete (slab) and reduces surface moisture evaporation.

Because MASTERKURE 111 CF retards evaporation, it is especially effective in combating rapid drying conditions (high concrete and / or ambient temperatures, low humidity, high winds, direct sunlight, work in heated interiors during cold weather, etc.).

### Recommended for

- Concrete surfaces where the evaporation rate exceeds the rate of bleeding of the concrete.
- GGBS concrete.
- Condensed silica fume concrete.
- Concrete containing fly ash.
- All BASF cementitious dry shakes.

### Features and benefits

- Reduces surface moisture evaporation approx 80% in wind and about 40% in sunlight. It has no effect on the cement hydration process. Concrete strength (early and ultimate), abrasion resistance and durability are not altered, except for the improvement in overall quality resulting from the control of rapid evaporation. When applying MASTERTOP surface hardeners under hot and / or windy conditions, the use of MASTERKURE 111 CF is strongly recommended after screeding.
- Eliminates or reduces crusting, stickiness and underlying sponginess which often cause unevenness and poor surface texture by controlling the evaporation of concrete while waiting between initial finishing and later troweling or power floating.

- Reduces and, in many instances, eliminates plastic shrinkage cracking and wind crusting of flatwork surfaces. Also supplements the recommended practices for hot weather concreting. Under some conditions, properly diluted MASTERKURE 111 CF alone will provide the necessary safeguard against the ill effects of evaporation.
- Increases the amount of surface handled per finisher, even under rapid-drying conditions because the surface remains plastic and finishable for a longer time. Thus, work can proceed whereas, without MASTERKURE 111CF, it might be postponed to avoid finishing problems.

MASTERKURE 111 CF is an evaporation retardant monomolecular filming agent the use of which is mentioned in:

ACI 305 Hot Weather Concreting

ACI 345 Guide for Concrete Highway Bridge Deck Construction

ACI 302.1 Guide for Concrete Flooring and Slab Construction

### Packaging

MASTERKURE 111 CF evaporation reducer is supplied in 20 and 210 litre containers.

### Yield / coverage

20 litres of MASTERKURE 111 CF mixed with 180 litres of water yields 200 litres of sprayable solution. Recommended application rates is 6-8m<sup>2</sup>/litre. Agitate MASTERKURE 111 CF before mixing with water. Re-agitate mixed materials before applying.

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## Directions

MASTERKURE 111 CF must be mixed at a ratio of 1 litre of MASTERKURE 111 CF concentrate to 9 litres of water.

Apply with a constant pressure or industrial type sprayer.

MASTERKURE 111 CF contains a fluorescent colour tint which disappears completely upon drying when sprayed onto the surface immediately after screeding and / or between finishing operations (as needed). MASTERKURE 111 CF forms a monomolecular film. This film is easily distinguished from untreated surfaces by its yellow colour in the presence of surface moisture and ultraviolet rays (sunlight or artificial lighting). When applying MASTERTOP surface hardeners, MASTERKURE 111 CF can be used after screeding and after the first floating operation, if necessary. The residue remaining on the surface of hardened concrete does not impair bonding or alter colour. The protective shield of MASTERKURE 111 CF usually lasts as long as the concrete remains plastic, despite succeeding floating and troweling operations.

## Precautions

NOTE: DO NOT use MASTERKURE 111 CF as a finishing aid to facilitate easier finishing of:

- Cementitious dry shake surface hardeners or toppings after they have begun to take initial set.
- MASTERKURE 111 CF evaporation retardant is not a curing agent. Concrete treated with

this product must still be cured. BASF is not responsible for compatibility or results when MASTERKURE 111 CF evaporation reducer is used with other manufacturers' products.

- MASTERKURE 111 CF reduces evaporation only while concrete is in its plastic state. It is not a substitute for early curing of hardened concrete nor does it alter the effectiveness of membrane-type curing compounds.
- MASTERKURE 111 CF is not to be applied during any finishing operation nor should it be worked into the concrete surface.
- MASTERKURE 111 CF must be protected from freezing. Extreme cold may cause segregation which cannot be reconstituted.
- Any residue remaining from spillage or spraying of MASTERKURE 111 CF concentrate on the surface of hardened concrete should not be allowed to dry. Wipe it up immediately, then rinse the surface with water.

If the MASTERKURE 111 CF residue is allowed to dry on hardened concrete, a red-brown stain may appear. To remove the stain, place a cloth saturated in a household-type, chlorinated bleach onto the stain, then cover it with plastic to retard evaporation. After approximately one hour, the stain should disappear completely. Rinse the area with water.

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