

Description

Confilm evaporation reducer helps produce high quality concrete flatwork and reduces surface moisture evaporation. Because Confilm retards evaporation, it is especially effective in combating rapid drying conditions including, high concrete and/or ambient temperatures, low humidity, high winds, direct sunlight or work in heated interiors during cold weather, etc.

Applications

Recommended for use in:

- Concrete surfaces where the evaporation rate exceeds the rate of bleeding of the concrete
- Air-entrained and non-air-entrained concrete
- Silica fume concrete
- Concrete containing fly ash

CONFILM®

Evaporation Reducer

Features

- Reduces surface moisture evaporation about 80% in wind and about 40% in sunlight
- Eliminates or reduces crusting, stickiness and underlying sponginess which often cause unevenness and poor surface texture
- Reduces and, in many instances, eliminates plastic shrinkage cracking and wind crusting of flatwork surfaces
- Supplements the recommended practices for hot weather concreting
- Safeguards against the ill effects of evaporation
- Allows lower slump and lower unit water content in concrete used for flatwork
- Facilitates use of air-entrained concrete, required for durability and workability, in situations where air-entrainment might be avoided for fear that it would increase concrete's susceptibility to crusting and stickiness under drying conditions

Benefits

- Virtually eliminates need to add extra mixing water to compensate for rapid evaporation during finishing
- Saves time and money by increasing the amount of surface handled per finisher even under rapid drying conditions
- Timing of the operations is less critical, thus reducing overall cost

Performance Characteristics

A detailed technical discussion about the action of monomolecular films, typified by Confilm evaporation reducer, is contained in the Journal of the American Concrete Institute, Volume 62, pp. 977-985. The use of a monomolecular film to prevent rapid drying of fresh concrete is recommended in the following ACI documents: ACI 302.1R, "Guide for Concrete Floor and Slab Construction"; ACI 305R, "Hot Weather Concreting"; ACI 308R, "Guide to Curing Concrete"; and ACI 345R, "Guide for Concrete Highway Bridge Deck Construction".

Guidelines for Use

Dosage: One gal (3.8 L) of Confilm evaporation reducer mixed with 9 gal (34.1 L) of water yields 10 gal (37.9 L) of sprayable solution. This diluted amount of Confilm evaporation reducer (1:9) should cover 2,000 to 4,000 ft² (186 to 372 m²) of fresh concrete. If more than one application of Confilm is made, as under adverse drying conditions, the quantity required will be increased accordingly.

Mixing: Depending on the application, Confilm evaporation reducer can be mixed at a ratio of up to 1 part Confilm concentrate to 9 parts of water. Agitate Confilm evaporation reducer before mixing with water. Re-agitate mixed materials before applying.

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Application: Apply with a constant pressure or industrial-type sprayer. Confilm evaporation reducer forms a monomolecular film when sprayed onto the concrete surface immediately after screeding and/or between finishing operations (as needed). This protective shield usually lasts as long as concrete remains plastic, despite succeeding floating and troweling operations.

Treated surfaces are easily distinguished from untreated surfaces because of the greenish-yellow color of the film in the presence of surface moisture and ultraviolet rays (sunlight or artificial lighting). The fluorescent color tint disappears completely upon drying. The residue remaining on the surface of hardened concrete does not impair bonding or alter color.

Product Notes

Precaution: Do not use Confilm evaporation reducer as a finishing aid to facilitate finishing of:

- Cementitious dry-shake surface hardeners or toppings
- Air-entrained and non-air-entrained concrete, silica fume concrete or fly ash concrete

Confilm evaporation reducer is not to be applied during final flatwork steel troweling operations. Confilm evaporation reducer is not a curing agent. Concrete treated with this product must still be cured. BASF Construction Chemicals is not responsible for compatibility or results when Confilm evaporation reducer is used with other manufacturers' products. Confilm 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. Confilm evaporation reducer is not to be applied during any finishing operation nor should it be worked into the concrete surface.

Any residue remaining from spillage or spraying of Confilm evaporation reducer concentrate on the surface of hardened concrete should not be allowed to dry. Wipe it immediately, then rinse the surface with water. If the Confilm concentrate residue is allowed to dry on hardened concrete, a reddish-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.

Storage and Handling

Storage Temperature: Confilm evaporation reducer must be protected from freezing. Extreme cold may cause segregation after which the product cannot be reconstituted.

Shelf Life: Confilm evaporation reducer has a minimum shelf life of 12 months. Depending on storage conditions, the shelf life may be greater than stated. Please contact your BASF Construction Chemicals representative regarding suitability for use if the shelf life of Confilm evaporation reducer has been exceeded.

Packaging

Confilm evaporation reducer is supplied in 1, 5 and 55 gal (3.8, 18.9 and 208 L) containers.

Related Documents

Material Safety Data Sheets: Confilm evaporation reducer.

Additional Information

For suggested specification information or for additional product data on Confilm evaporation reducer, contact your BASF Construction Chemicals representative.

The Admixture Systems business of BASF Construction Chemicals is a leading provider of innovative additives for specialty concrete used in the ready mix, precast, manufactured concrete products, underground construction and paving markets throughout the NAFTA region. The Company's respected Master Builders brand products are used to improve the placing, pumping, finishing, appearance and performance characteristics of concrete.

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Admixture Systems

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