Technical Bulletin

Acme Shield® Plus

DESCRIPTION

Acme Shield® Plus is a liquid combination water-repellent and plasticizer used in the production of CMUs, SRWs and pavers. Designed for use during the mixing process, Acme Shield® Plus reacts with the calcium salts found in cement, aggregate, and sand to provide water repellency and reduce efflorescence.

BENEFITS

- Excellent stability with no hazardous or toxic ingredients
- 100% active material
- Usable without loss of effectiveness if frozen, provided preheated to and maintained at 50-55°F or higher
- Better color distribution, reduced color bleeding and less fading of block
- · Doesn't cake or congeal when exposed to air
- · Improves green strength
- Reduces cycle times
- Improves surface texture

DIRECTIONS FOR USE

In normal weight block with proper gradation: Add 16 to 20 ounces of Acme Shield® Plus per 100 pounds of cement. This can reduce absorbency to less than 5%, resulting in effective water repellency and controlled efflorescence. Results may vary with different mix designs. Acme Shield® Plus should also be maintained at 50-55°F or higher to assure the viscosity needed for uniform distribution throughout the mix. Adding Acme Shield® Plus at lower temperatures could result in improper dispersion.

In medium weight block: Use 24 to 28 ounces of Acme Shield® Plus per 100 pounds of cement.

In lightweight units: Consult a Cargill representative before using Acme Shield® Plus.

For use as a plasticizer in standard gray concrete masonry units (CMU): As little as 2 to 6 ounces per 100 pounds of cement can be used with minimum water repellency and efflorescence control.

Testing has determined that the dosages recommended here are the most effective for improving water repellency; however, many users have successfully controlled efflorescence with lower dosages. Normally, a half loading of Acme Shield Plus in normal, medium or light weight block will control efflorescence. Users should determine proper dosage for their block through their own testing.

ADDITIONAL INFORMATION FOR USE

Any admixture, such as accelerators, anti-freeze agents, retarders, and plasticizers, etc., used in conjunction with Acme Shield Plus in either block or mortar, should be cleared for use by a Cargill representative to assure compatibility.

Acme Sheild Plus is not designed to withstand hydrostatic pressure. Allowing water to be entrapped in block cavities of unfinished walls could result in efflorescence.

Acme Shield Plus should be added to the pre-wet. If no pre-wet is provided, Acme Shield Plus may be added simultaneously but not mixed with the initial or final water. In no case should Acme Shield Plus come in contact with dry cement or dry colors, as "balling" may occur, resulting in uneven dispersion of Acme Sheild Plus throughout the batch.

SHIPPING CONTAINER

55 gallon drums and 330 gallon totes

COMPANION PRODUCTS

Acme Shield®, Accelerators, Rack Coating, Plasticizers, Form Release Agents

