



# ChemMasters

SPECIALTY CONSTRUCTION PRODUCTS

## FREEZBAN

LIQUID AND BEAD FORMULATIONS  
OF CALCIUM CHLORIDE

## P R O D U C T D A T A

### DESCRIPTION

**FreezBan™** liquid and **FreezBan Beads** are multipurpose admixtures for use with portland cement/lime mortar and prepared masonry mortars and non-reinforced concrete. This exclusive formulation combines an effective and time proven chemical accelerator, calcium chloride, with a powerful wetting agent.

### USES

- Plain concrete and mortar placements down to 15°F (-9°C)
- Setting brick, concrete block, stone, glass block and structural clay tile
- Driveways, sidewalks, patios, slabs on grade and footers not containing reinforcing steel

### ADVANTAGES

- **FreezBan Beads** dissolve faster and more completely than competitive powders
- Permits masonry to bear loads sooner
- Improves adhesion, mortar density and workability
- Increases early and ultimate strengths, tensile and compressive strengths
- Minimizes shrinkage
- Significantly reduces efflorescence

### TECHNICAL DATA

**FreezBan** and **FreezBan Beads** fully comply with the requirements of the following specifications for accelerating admixtures in concrete and masonry mortar:

- ASTM C-494, Type C
- AASHTO M-194, Type C
- Army Corps of Engineers CRD-C-87, Type C

### ESTIMATING GUIDE

#### LOWEST EXPECTED

#### TEMPERATURE

- Above 32°F (0°C)
- Above 25°F (-4°C)
- Above 20°F (-6°C)
- Above 15°F (-9°C)

#### PER BAG OF MASONRY MORTAR

##### LIQUID      Beads

- 1pt. (0.5L)      1/2 bag
- 1.5 pt. (0.7L)      bag
- 1 qt. (0.9L)      1 bag
- 1.5 qt. (1.4L)      1 bag

#### PER SACK OF PORTLAND CEMENT

- Above 32°F (0°C)      1qt. (0.9L)      1 bag
- Above 25°F (-4°C)      1.5 qt. (1.4L)      1.5 bag
- Above 20°F (-6°C)      2 qt. (1.9L)      2 bag
- Above 15°F (-9°C)      3 qt. (2.8L)      2 bag

Limed Mortars: Use 1 quart (0.9 liter) liquid **FreezBan** or 1 bag **FreezBan Beads** for each bag of lime added in addition to the portland cement requirements listed above.

At temperatures above 80°F (57°C), the amount of **FreezBan** may be reduced proportionately to prevent too rapid a set acceleration, but never use less than 0.5 pint (0.24 liter) of **FreezBan** or 1/8 bag of **FreezBan Beads**, per bag of masonry mortar or less than 1 pint (0.5 liter) of **FreezBan** liquid or 1/4 bag of **FreezBan Beads** per sack of cement.

### DIRECTIONS

Add directly to the gauging water for each batch of mortar. Under no circumstances should **FreezBan** liquid or **FreezBan Beads** be added to the cement or mortar. To obtain maximum results:

- Keep masonry units dry
- Use a windbreak around mortar board and mixer to minimize the chill factor
- Keep sand and gauging water ice free
- Protect work from freezing for first 24 hours
- Keep walls dry next to metal door or window frames. Frames may corrode due to moisture and air
- If frames are scratched or abraded, reapply a metal primer



## ChemMasters

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## CLEANUP

Clean tools or containers that come in contact with **FrezBan** with water.

## PACKAGING

**FrezBan** is available in 55 U.S. gallon (208 Liter drums) , 5 U.S. gallon (18.9 Liter) pails and 1 U.S. gallon (3.78 Liter) jugs, packed 4 per case. **FrezBan Beads** are packaged in 1.5 pound (0.68 Kg) bags, 20 per case.

## LIMITATIONS

- **FrezBan** liquid and **FrezBan Beads** change the finishing characteristics of mortar and should be used throughout a given surface. Stopping in the middle of a wall may create bands or joints with a noticeable difference in appearance.
- Note: Independent Laboratory Tests using ASTM procedures prove no discoloration or efflorescence is caused by using **FrezBan** formulations.
- Where steel, iron or metal work, such as door or window frames and casings are not completely imbedded in the mortar, it is recommended that the surfaces coming into contact with the mortar be coated with a rust preventive material.
- The best prevention eliminates the two primary causes of oxidation, moisture and oxygen. Proper waterproofing of masonry construction is imperative to prevent the problems often mis-associated with the use of materials containing chloride ions. American Concrete Institute (ACI) publication 306, Cold Weather Concreting states, *In general, corrosion of conventional reinforcement has not occurred frequently due to chloride but the real threat of an increased potential for corrosion exists where chlorides are used, particularly where there is cracking, wet and dry areas, shallow cover and permeable concrete.*

## STORAGE

To prevent contamination by moisture and dirt, drums that have been opened should be tightly closed and stored in horizontal position to prevent moisture accumulation on drum heads. If crystals form when **FrezBan** is stored at extreme low temperatures, raise temperature to above 30°F (-1°C) and thoroughly agitate until in solution before use. Shelf life of properly stored material is two years from date of manufacture.

## CAUTION

Causes eye irritation on direct contact. Overexposure may cause skin and respiratory tract irritation. Do not take internally. Keep out of reach of children.

All label precautions and the MSDS must be read and understood before using this product.

**Make certain that the most current versions of the product data sheet and MSDS are being used. Go to [www.chemmasters.net](http://www.chemmasters.net) or contact ChemMasters customer service at 1.800.486.7866 to verify the most current version.**

Proper application is the responsibility of the user. ChemMasters can only make technical recommendations and cannot provide quality control on the jobsite.

***This Product is Formulated and Labeled for Industrial and Commercial Use Only***

FOR BEST RESULTS AND SAFEST USAGE, USER IS SPECIFICALLY DIRECTED TO CONSULT THE CURRENT MATERIAL SAFETY DATA SHEET AND PACKAGE LABEL FOR THIS PRODUCT

We warrant our products to meet our published specifications and to be free from defects in materials and workmanship to the acceptable quality levels defined in these specifications. If acceptable quality levels are not specified, the acceptable quality levels will be those normally supplied by us for the product. We make no guarantee of the results to be obtained from the use of our products. The determination as to the adaptability of any of our products to the specific needs of the Buyer is solely Buyer's prerogative and responsibility. We are glad to offer suggestions on the use of our products. Nevertheless, there are no warranties given except such expresses warranties offered in connection with the sale of a particular product. Our liability shall be limited to replacement of, or refund of an amount not to exceed the purchase price attributed to, the goods as to which such claim is made. Our selection of one of these alternatives shall be Buyer's exclusive remedy. IN NO CASE SHALL WE BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, CO-CONDITIONS AND REPRESENTATIONS, EITHER EXPRESSED OR IMPLIED, WHETHER ARISING UNDER ANY STATUTE, COMMON LAW, USAGE OR TRADE, COURSE OF DEALING OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.