

## **CP-100HMW** **Vinyl Ester Resin Brick & Tile Grout**

### **PRODUCT DESCRIPTION**

Blome CP-100HMW is a three-component, silica filled vinyl ester grout used for the installation of chemical resistant brick and tile. CP-100HMW is designed for bonding acid brick and tile in floor and trench applications requiring resistance to acids, bleaches, alkalis, solvents and other corrosive chemicals. CP-100HMW is especially suited for use in applications requiring resistance to strong oxidizers such as chlorine, chlorine dioxide, hypochlorite bleaches and oxidizing acids such as nitric and chromic. The material exhibits excellent bond strength to acid brick and tile and is well suited for applications requiring high physical properties.

Blome CP-100HMW Vinyl Ester Tile Grout is formulated specifically for use in the Food, Beverage, and Pharmaceutical manufacturing areas where strong acid or solvent service is expected. The superior bond characteristics of CP-100HMW provides for a wide range of uses, including vitrified ceramic tiles, red shale acid brick, and quarry tile. CP-100HMW is available in two standard color choices; off-white gray and black. Other colors may be available by special order.

### **TYPICAL USES**

Blome CP-100HMW is suitable for grouting chemical and abrasion resistant masonry units in a variety of applications including:

- Clean-in-place (CIP) areas in Food / Beverage Manufacturing
- Vitrified Ceramic and Acid brick flooring
- Vitrified Ceramic and Acid brick lined trenches and sumps

### **HANDLING CHARACTERISTICS**

Blome CP-100HMW is specially designed to have excellent flow and handling characteristics and a rapid cure once grouted into place. This results in a combination of high-quality tile and brickwork, and high production rates. CP-100HMW cures rapidly and provides an excellent bond to vitrified ceramic tiles, acid brick and quarry tile.

### **TYPICAL PROPERTIES**

#### **WET**

Components:	Three (3) – powder, resin, activator
Wet mortar density:	111 lbs./ft <sup>3</sup>
Mixed consistency:	Pourable Grout
Pot life:	50°F 25-30 minutes 77°F 15-18 minutes
Initial set:	50°F 6 - 8 hours 77°F 1 - 2 hours
Final cure	50°F 9 days minimum 77°F 7 days minimum

## CURED

Blome CP-100HMW complies with ASTM C-395

Absorption (ASTM C-413)	less than 0.4%
Bond Strength to brick (ASTM C-321)	Brick failure
Coefficient of Thermal Expansion (ASTM C-531)	12 x 10 <sup>-6</sup> in/in/°F
Color	Off white / Black
Compressive Strength (ASTM C-579)	12,500 psi
Temperature limit	Continuous: 225°F in suitable chemical service
Tensile Strength (ASTM C-307)	2,400 psi

## PACKAGING & STORAGE

Blome CP-100HMW is supplied as a three-component product, with a Resin, Catalyst (CHP) and Filler Powder. The use ratio of Filler Powder to Resin is 2.67 pbw to 1.0 pbw. CHP Catalyst is supplied at 3 oz/gal resin. Use 2 oz/gal resin at higher application temperatures.

### Unit Size 160 lbs.

Powder	120 lbs. (2 x 60 lb. Bags)
VE Cure (CHP)	15 oz (1 x 15 oz. Bottle)
Resin	45 lbs. (1 x 45 lb. Pails)

Shelf life for CP-100HMW powder and resin is nine (9) months if stored below 70°F at 50% relative humidity. Keep CP-100HMW Powder and Resin tightly sealed in original containers until ready for use. Store in a cool, dry place, out of direct sunlight, and on pallets at temperatures between 50°F – 80°F. Protect bags of CP-100HMW Powder from water and weather while in storage and on job site.

## ESTIMATED COVERAGE

Please refer to Blome Brick Mortar Usage Chart in Chemical Proofing Section of Blome International Catalog. This chart gives estimated coverage rates and does not allow for waste, joint variations or other job site contingencies.

## BID SPECIFICATION GUIDE

Use Blome CP-100HMW Vinyl Ester Resin Tile Grout as manufactured by Blome International, O'Fallon, MO.

## JOB SITE ENVIRONMENTAL CONDITIONS

Blome CP-100HMW must be applied while ambient temperatures are between 50°F and 80°F. Blome CP-100HMW components, tile, brick and substrate temperatures must also be maintained in this range. Blome Vinyl Ester Low Temperature Accelerator is available for use when temperatures drop below 50°F. Consult Blome for application and use details. Installations of CP-100HMW should be protected from water and weather during installation and curing.

## SURFACE PREPARATION

Tile and brick to be installed with Blome CP-100HMW must be clean, dry and oil free. Field waxed tiles shall be free of wax on the sides to ensure good bond to vertical surfaces. If tile or brick has been frozen, they must be thawed completely and allowed to dry prior to installation with Blome CP-100HMW. All surfaces should be swept clean, side joints vacuumed, and be free of dirt, dust, water or other jobsite contaminants.

## **SAFETY PRECAUTIONS**

Blome CP-100HMW Powder, Resin and mixes of them present various health hazards if handled improperly. CP-100HMW Powder contains silica and peroxide powders and CP-100HMW Resin is flammable and will cause eye injury and irritate skin. Wear respirator suitable for silica and peroxide powders, safety glasses with side shields, gloves and long sleeve shirts to prevent all contact with skin and eyes. After working with Blome CP-100HMW, wash thoroughly before eating, drinking, smoking or other activities.

## **APPLICATION EQUIPMENT**

Blome CP-100HMW is best mixed with a KOL, pail type mixer or in a pail using a drill motor driven paddle blade. This mixing equipment must be clean, dry and free of any contaminants including Portland Cement, other grouts, resins, etc. When mixed, CP-100HMW is grouted into place using a "Groutmaster" type rubber float or a steel finishing trowel.

## **MIXING AND APPLICATION**

Mix 3 oz CHP Catalyst per gallon of Resin for 1-2 minutes (use 2 oz/gal resin at higher application temperatures). Add approximately 2.67 parts by weight CP-100HMW Filler Powder to 1.0 part by weight preblended CP-100HMW Resin/catalyst and mix to a uniform grout consistency. Mix components using a clean, dry mechanical mixer or trowel for a minimum of 1-2 minutes, making sure there are no lumps or dry pockets of powder. The amount of powder may be adjusted, up or down, to achieve desired consistency for specific uses. More powder will produce a thicker consistency for some vertical applications such as cove base.

Pour mixed grout onto area to be grouted. Spread grout into open joints of tile or brickwork, starting at the lowest areas, making sure grout joints are completely full and then working to the highest areas. Using a "Groutmaster" type rubber float or a steel, finishing trowel, work grout into joints and strike excess grout from brick faces in a squeegee fashion, taking care to not draw surface wax into the joint spaces.. Be certain to pass over joints on a 45° angle, as to not disturb grout that has already flowed into joints.

In some instances, a second grout pass will be required to fill low spots and achieve even, full grout joints. This second grout pass should be applied within 24 hours of first grout pass to assure proper adhesion between passes. Allow grout in completed tile or brickwork to cure for three (3) days minimum prior to high-pressure steam removal of wax from brick or tile faces.

## **CLEANUP**

All tools, mixing equipment, gloves and application equipment should be cleaned up immediately using a citrus or biodegradable cleanser, with hot water, while material is still wet. If material begins to cure, solvent-based cleaners will be required for removal.

## WARRANTY

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. Our material data sheets and other literature are to be considered accurate and reliable, but are used as guides only.

WE GIVE NO WARRANTY OR GUARANTEE, WHETHER OF MERCHANT ABILITY OR FITNESS OF PURPOSE OR OTHERWISE, AND WE ASSUME NO LIABILITY IN CONNECTION THEREWITH. We are happy to give suggestions for applications; however, the user assumes all risks and liabilities in connection therewith regardless of any suggestion, we may give. We assume no liability for consequential or incidental damages. Our liability, in law and equity, shall be expressly limited to the replacement of non-conforming goods at our factory, or at our sole option, to repayment of the purchase price of the non-conforming goods.

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