



CP-101 Vinyl Ester Tile Mortar

PRODUCT DESCRIPTION

Blome CP-101 is a two component, silica filled vinyl ester mortar used for the installation of chemical resistant glazed tile. CP-101 is designed for bonding glazed tile in tank and vessel applications requiring resistance to bleached pulp, acids, alkalis, organics and other corrosive chemicals. CP-101 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 glazed tile.

Blome CP-101HMW is also available for enhanced performance at higher temperatures and in strong acid or solvent service. CP-101HMW withstands temperature excursions up to 250°F, resists higher concentrations of acids and withstands exposure to many aggressive solvents. Specify when ordering.

TYPICAL USES

Blome CP-101 is suitable for bonding chemical resistant glazed tile in a variety of applications including:

- High Density Pulp Storage Tanks
- Paper Machine Tile Tanks
- Recycled Fiber Tanks and Chests
- Tuckpointing tile tanks and chests
- Tile lined trenches and sumps

HANDLING CHARACTERISTICS

Blome CP-101 offers excellent trowelling and handling characteristics, with sufficient body and thixotropy for successful installation of glazed tile. CP-101 is smooth spreading and will support a 1/4" mortar joint on vertical installations. CP-101 will hold tile and secure them from slipping or sliding while the mortar cures. CP-101 cures rapidly and provides an excellent bond to glazed tile. This unique formulation produces quality results and high production rates.

TYPICAL PROPERTIES

WET

Components:	Two (2) - powder & resin
Wet mortar density:	125 lbs./ft ³
Mixed consistency:	Creamy mortar
Pot life:	50°F 45 minutes 77°F 20 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-101 complies with ASTM C-395	
Absorption (ASTM C-413)	less than 0.4%
Bond Strength to brick (ASTM C-321)	200 psi
Coefficient of Thermal Expansion (ASTM C-531)	12 x 10 ⁻⁶ in/in/°F
Color	off white
Compressive Strength (ASTM C-579)	11,000 psi
Temperature limit	CP-101 210°F CP-101HMW 250°F
Tensile Strength (ASTM C-307)	2,200 psi

PACKAGING & STORAGE

Blome CP-101 is supplied as a two component product, with a filler powder and a resin. CP-101 Powder (Part A) is packaged in 70 lb. Bags and CP-101 Resin (Part B) is packaged in 35 lb. Pails or 450 lb. Drums. The use ratio of Powder to Resin is 4.0 pbw to 1.0 pbw.

Unit Size	175 lbs.
Powder	140 lbs. (2 x 70 lb. bags)
Resin	35 lbs. (1 x 35 lb. pails)

Shelf life for CP-101 powder and resin is three (3) months. Keep CP-101 Powder and Resin tightly sealed in original containers until ready for use. Store Powder and Resin in a cool, dry place, out of direct sunlight, and on pallets at temperatures between 50°F – 80°F. Protect bags of CP-101 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-101 Vinyl Ester Tile Mortar as manufactured by Blome International, O'Fallon, MO.

JOB SITE ENVIRONMENTAL CONDITIONS

Blome CP-101 must be applied while ambient temperatures are between 50°F and 90°F. Blome CP-101 components, brick, tile 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-101 should be protected from water and weather during installation and curing.

SURFACE PREPARATION

Tile to be installed with Blome CP-101 must be clean, dry and oil free. If tile has been frozen, they must be thawed completely and allowed to dry prior to installation with Blome CP-101. If applied over Liquid or Sheet membranes, these surfaces should be clean and dry prior to installation of Blome CP-101 bed joint. These surfaces should be swept clean and be free of dirt, dust, water or other job site contaminants.

SAFETY PRECAUTIONS

Blome CP-101 Powder, Resin and mixes of them present various health hazards if handled improperly. CP-101 Powder contains silica and peroxide powders and CP-101 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-101, wash thoroughly before eating, drinking, smoking or other activities.

APPLICATION EQUIPMENT

Blome CP-101 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 mortars or resins. When mixed, CP-101 is applied to tile or brick with a pointing or margin trowel.

MIXING AND APPLICATION

Add approximately 4.0 parts by weight CP-101 Powder to 1.0 part by weight CP-101 Resin. Mix components using a clean, dry mechanical mixer or trowel for a minimum of 2-3 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 vertical or overhead applications. Using a clean, dry pointing or margin trowel, butter tile evenly on 2 or 3 sides. Slide buttered tile into place, squeezing excess mortar from joints and striking off. Mortar joint thickness should be 1/8" to 1/4".

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.