

CP-3810 **Water Washable Epoxy Grout**

PRODUCT DESCRIPTION

Blome CP-3810 (vitrified tile grade) is a three component, water washable epoxy grout used for the installation of VERSI-LINE™ Vitrified Ceramic Systems using power grouting or tiler methods. Specially graded fillers and adhesion promoters combine to give this grout superior flow and adhesion properties. CP-3810 contains a dynamic antimicrobial agent that does not promote the growth of potentially harmful bacteria. CP-3810 is especially suited for use in dairy and food plant dairy applications requiring sanitary flooring with good chemical resistance. Blome CP-3810 is designed for grouting fully-vitrified ceramic tiles, vitrified ceramic pavers, clinker tiles and brick in floor, cove and trench applications requiring resistance to caustic cleaning solutions, acids, hypochlorite bleaches, dilute CIP chemicals and other harsh cleaning compounds.

Blome CP-3810 is formulated specifically for use in the Food, Beverage, and Pharmaceutical manufacturing areas where strong chemical service is expected. Blome CP-3810 exhibits superior bond strength to VERSI-LINE™ Vitrified Ceramic tile and paver systems, acid brick and quarry tile along with high physical properties and is well suited for applications exposed to traffic and physical abuse.

TYPICAL USES

Blome CP-3810 is suitable for grouting a variety of vitrified ceramics and non-vitreous brick and tile in a variety of applications including:

- VERSI-LINE™ Vitrified Ceramic Systems flooring
- VERSI-LINE™ Vitrified Ceramic lined trenches and sumps
- Dairy brick flooring
- Brick and tile cove base

HANDLING CHARACTERISTICS

Blome CP-3810 is specially designed to have excellent flow characteristics making it suitable for the narrow joint widths found in VERSI-LINE™ Vitrified Ceramic tile and paver systems. CP-3810 has excellent water cleanability. This results in a combination of high quality ceramic tile, pavers and brickwork, and high production rates. CP-3810 cures rapidly and provides an excellent bond to VERSI-LINE™ Vitrified Ceramic tile and paver systems, brick and quarry tile. This combination of handling, cleaning and curing properties makes Blome CP-3810 the ideal epoxy grout for flooring installations for the dairy, food and beverage industries.

TYPICAL PROPERTIES

WET Components:	Three (3) – Resin, Hardener & Powder
Wet mortar density:	109 lbs./ft ³
Mixed consistency:	Flowable grout
Pot life:	50°F 70-90 minutes 77°F 50-60 minutes
Initial set:	50°F 20-24 hours 77°F 8-10 hours
Final cure	50°F 7 days minimum 77°F 5 days minimum

CURED

Blome CP-3810 Complies with ASTM C-395	
Absorption (ASTM C-413)	less than 0.2%
Bond Strength to brick (ASTM C-321)	brick failure
Bond Strength to Fully Vitrified Tile	2,550
Coefficient of Thermal Expansion (ASTM C-531)	12 - 14 x 10 ⁻⁶ in/in/°F
Color	black, gray, red
Compressive Strength (ASTM C-579)	14,800
Flexural Strength (ASTM C-580)	4,150 psi
Tensile Strength (ASTM C-307)	3,300 psi

PACKAGING & STORAGE

Blome CP-3810 is supplied as a three (3) component product, with a Resin, Hardener and specially graded quartz Filler. CP-3810 Resin (Part A) is packaged in one gallon cans and five gallon pails, and CP-3810 Hardener (Part B) is packaged in ½ gallon and 1.5 gallon cans. CP-3810 Colored Quartz (CQ) Filler powder (Part C) is packaged in 28 lb. and 50 lb. bags and is available in several colors.

	<u>Unit Size</u>	<u>40.0 lbs.</u>	<u>206 lbs</u>
CP-3810 Resin	9.2 lbs (1 gal)		43 lbs (4.5 gal)
CP-3810 Hardener	2.8 lbs. (0.33 gal)		13 lbs (1.5 gal)
VTG Powder	28 lbs.		150 lbs (3 x 50 lb)

Bulk units are available on request.

Shelf life for CP-3810 components is one (1) year. Keep CP-3810 components tightly sealed in original containers until ready for use. Store components in a cool, dry place, out of direct sunlight, and on pallets at temperatures between 50°F – 80°F. Protect bags of CP-3810 Filler from water and weather while in storage and on job site.

BID SPECIFICATION GUIDE

Use Blome CP-3810 Water Washable Epoxy Grout as specified and manufactured by Blome International, O'Fallon, MO.

ESTIMATED COVERAGE

Please consult Blome International regarding expected coverage rates for power-grouting vitrified ceramics. Please refer to Blome Brick and Tile 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 jobsite contingencies.

JOB SITE ENVIRONMENTAL CONDITIONS

Blome CP-3810 must be applied while ambient temperatures are between 50°F and 90°F. Blome CP-3810 components, vitrified ceramic units, brick, tile and substrate temperatures must also be maintained in this range. Blome CP-3810-LTC Hardener is available for use in low temperatures. CP-3810-LTC Low Temperature Cure Hardener will cure at temperatures as low as 40°F. Installations of CP-3810 should be protected from weather during installation and curing.

SURFACE PREPARATION

Blome CP-3810 is designed for use with both power-grouting and trowel methods of vitrified ceramic and brick grouting. Vitrified ceramic tile and pavers, brick and quarry tile to be installed with Blome CP-3810 must be clean, dry and oil free. If vitrified ceramic, brick or tile has been frozen, they must be thawed completely and allowed to dry prior to installation with Blome CP-3810. Open joints of vitrified ceramics or brick to be grouted should be clean and dry prior to installation of Blome CP-3810. Open joints in vitrified ceramic or brick work in these areas should be swept or vacuumed clean and be free of dirt, dust, water or other job site contaminants.

SAFETY PRECAUTIONS

Blome CP-3810 Resin, Hardener, Filler, and mixes of them present various health hazards if handled improperly. CP-3810 Powder contains silica dust, CP-3810 Resin will cause eye injury and irritate skin and CP-3810 Hardener is a corrosive liquid. Wear respirator suitable for silica dust, safety glasses with side shields, gloves and long sleeve shirts to prevent all contact with skin and eyes. After working with Blome CP-3810, wash thoroughly before eating, drinking, smoking or other activities.

APPLICATION EQUIPMENT

Blome CP-3810 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-3810 is grouted into place using a "Groutmaster" type rubber float or a steel finishing trowel.

MIXING AND APPLICATION

Mix together one gallon can of Resin (Part A) and one quart can of Hardener (Part B) and blend thoroughly for 1-2 minutes. To this mixture, add one bag (28 lbs.) of Filler powder (Part C), 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 vitrified ceramic tile, vitrified pavers, or brick, starting at the lowest areas, making sure grout joints are completely full and then working to the highest areas.

Power-grouting Method: By Qualified Applicators

Tilesetter's Method: 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. 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.

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.

For stubborn to remove film on the surface of a finished floor, use Blome Epoxy Film Remover. Please consult a Blome International representative on the specification and use of this product.

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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