

# Mer-Krete™ ProEpoxy

## 100% SOLIDS EXPOXY MORTAR AND GROUT

### 1. PRODUCT NAME

#### ProEpoxy

100% Solids Epoxy Mortar and Grout

### 2. MANUFACTURER

Mer-Krete Systems  
501 Van Ness Avenue  
Torrance, CA 90501  
PH (323) 775-2461  
FAX (310) 320-4938  
(800) 851-6303  
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### 3. PRODUCT DESCRIPTION

#### BASIC USE

**ProEpoxy** is a 3-component, 100% solids epoxy compound developed for sanitary applications.

**ProEpoxy** can be used for setting and grouting ceramic and quarry tile, pavers, mosaics on horizontal and vertical surfaces. Use in commercial breweries, dairies, food processing facilities, distilleries, residential kitchens and bathrooms. It produces a high strength mortar that is stain resistant, impermeable, and shock resistant.

#### FEATURES

**ProEpoxy** has exceptionally high chemical resistance to many acids, alkalis, solvents and household stains. It is used in a mortar as thin as 1/16" to 1/8" after tiles have been properly beat-in. It is water cleanable before curing, nonflammable, and easy to work. **ProEpoxy** is not affected by prolonged contact with water, but does not form a waterproof membrane. Use **Mer-Krete HydroGuard One** or **Hydro-Guard 2000** (if a waterproof membrane is required).

Suitable backing, when properly prepared, include plumb and true masonry concrete, and cured Portland cement mortar beds, brick, ceramic tile, glass mesh mortar units, steel, glass and fiberglass. Areas of particular use are in industrial plants, particularly chemical and food processing plants such as dairies, breweries, bottling plants, textile and metal finishing plants, where the use of acids, alkalis, solvents, strong detergents and other chemicals cause erosion and damage to the setting beds and grout joints. Other areas include hospitals, restaurants, food preparation areas and similar installations where clinical sanitation is maintained by harsh cleaning methods and countertops, back-splashes, tub and shower areas, sunken tile tubs and swimming pools requiring a completely waterproof system.

### 4. TECHNICAL STANDARD

#### APPLICABLE STANDARDS

**ProEpoxy** Conforms to requirements for chemical-resistant, water cleanable tile setting and grouting epoxy found in ANSI A108.6 and A118.3.

### 5. INSTALLATION

#### SURFACE PREPARATION

All surfaces on which tiles are to be set must be dry, structurally sound, and not subject to temperatures below 65°F or above 95°F. Detailed installation procedures and use of epoxy mortars may be found in the T.C.A. Handbook under F-143, F-131, F-132, TR 711, and TR-912 and in addition, in ANSI A108.6.

#### Cementitious Substrates

Surfaces must be dry and free of all efflorescence, grease, oil, dirt, dust, curing compounds, sealers, cut back residue, old adhesives, asphalt coatings and any other foreign matter. Waterproofing and crack isolation membrane must be approved in writing by an officer of the manufacturer. Cleaning may be accomplished via mechanical sanding, scraping, or chipping. Surfaces may be cleaned with muriatic acid if thoroughly flushed and neutralized. Smooth steel

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For the latest and most current product information, make sure to visit our website at: [www.merkrete.com](http://www.merkrete.com)

### TECHNICAL ASSISTANCE:

Specification assistance is highly recommended prior to a proposed installation. Contact any Mer-Krete technical representative for recommendations over existing substrates or problem areas.

#### MER-KRETE PROEPOXY TEST DATA

Test	Requirement	Value
Water Clean up	80 Min	90 MIN
Initial Set 70°	> 2 Hours	>5 Hours
Shrinkage @ 7 Days	< 0.25%	<0.25%
Sag (Vertical)	None	None
Bond Strength (PSI) 14 days	>1000	>1200
Compressive Strength (PSI) 7 Days	>3500	>7000
Tensile Strength (PSI) 7 days	>1000	>2000
SQUARE FEET PER GALLON		
Trowel size	3/16" x 1/4" V-Notch	1/4" x 1/4" Square Notch
ProEpoxy	36	22



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troweled concrete floor should be roughened to insure a superior bond. Dry porous concrete should not be dampened with water prior to the application of epoxy mortar. Instead skim-coat a thin layer of epoxy mortar first, then apply sufficient mortar to be notched.

### Plywood Substrates

All wooden flooring, when placed over conventional floor joist or other systems should be of a design and thickness so as to maintain a substrate of deflection not to exceed 1/360 of span, including live and dead load. Further, the flooring to receive the **ProEpoxy** should be exterior grade plywood only, secured with screw type nails at 6-in. centers along the edges and 8-in. centers within the field, and glued where possible. Leave a gap of 1/4" between sheets of plywood and all materials which they abut. During application of epoxy to plywood surfaces, force epoxy between edges of plywood sheets to completely fill the gaps. In addition all wooden surfaces must be for interior use only and protected from exposure to water.

### Miscellaneous Substrates

Other substrates like steel, glass, and fiberglass must be free of all oils, coatings, dust and moisture. In addition, these surfaces should be roughened to insure a good bond. It is also essential that the existing surface be structurally sound and firmly attached to the supporting structure.

### Expansion Joints

Install in accordance with local building codes. See EJ171 in T.C.A. Handbook for detailed specifications.

### MIXING

For all units, pour Part A & B into a clean mixing pail and mix thoroughly. Add the entire content of Part C and mix until uniform. If a power mixer is used, it must be 300 RPM or less to avoid entrapping air bubbles, which cause pinholes in the grout. Do not over-mix, as this will cause the epoxy to flash set.

### APPLICATION FOR SETTING

Spread mortar with flat side of trowel to key-in substrate. Then, reapply additional mortar to a depth sufficient to be notched with a suitable trowel that will leave only enough mortar to give 100% contact with back of tile and a subsequent mortar bed of 1/16" for ceramic mosaic tile to 3/32" for quarry tile. Temperature affects time. Therefore, it is advisable to occasionally remove a tile to be sure mortar has not skinned over and sufficient transfer is being made. Approximate tack time is 30 minutes at 70°F. It is also required that tiles be "beat-in" to obtain good transfer of mortar to tile and for proper alignment. Should epoxy mortar get on surface of tile, remove it with a damp sponge before it cures.

NOTE: As a practical test it is recommended that three or more separate twelve inch square areas of tile be bonded to the properly prepared surface with the actual tile and bonding materials that will be used on the finished installation. These should be allowed to cure for three to seven days and then removed with a hammer and chisel. At this point, one can determine if adequate bond has been obtained or if a problem exists.

### APPLICATION FOR GROUTING

Allow tiles to set firmly before grouting (1-2 days). Mix the epoxy as described above. Apply grout using a hard rubber float filling all joints full and evenly with surface of tile. Remove all excess epoxy from surface of tile with the edge of the rubber float before it begins to set by holding the float at a 90° angle and pulling it diagonally across the joints. Clean the remaining grout off the surface of the tile using clean water and a Scotch-Brite® pad and towel, or a stiff sponge with rounded edges. Special care should be exercised to avoid removing excessive material from the grout joint during cleaning as ProEpoxy will be very soft.

NOTE: On unglazed tiles, sealing with a grout release may be necessary to prevent residue from being absorbed into tile. Joint width 1/16"-3/8" maximum.

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### CURING

After applications protect setting and grouting material for 1 day against foot traffic and protect the grout from chemical (industrial cleaners) attack for the first 14 days. Initial maintenance for the first 7 days shall be done with clean water only. The day following grouting, if haze is present, it must be removed with clean water only.

### LIMITATIONS

**ProEpoxy** should not be used in an environment above 250°F for any extended period of time and must be mixed and used exactly as directed on labels. Although suitable for exterior applications, lighter colors will darken from UV exposure.

## 6. AVAILABILITY

Colors – 22 available

1 Gallon Unit Consists of:

Part A- Liquid Epoxy Resin

Part B- Liquid Hardener

Part C- Dry Colored Aggregate

**Mer-krete ProEpoxy** is available at leading construction and tile houses and distributors. Contact Mer-krete for the name of the nearest dealer.

## 7. WARRANTY

Mer-Krete warrants that this product meets applicable ANSI standards in force at the time of manufacture. Mer-Krete will replace any product which proves defective due to quality of ingredients used or due to the manufacturing process itself. The warranty shall apply only if the product is installed and used strictly in accordance with applicable industry standards, specifications, and instructions provided by Mer-Krete. Mer-Krete shall not be liable for misapplication, misuse or abuse of the product, application or other event outside of its control. Replacement of defective product or, at Mer-Krete's option, refund of the price of product of any defective item shall be the buyer's sole remedy under this warranty. Mer-Krete shall in no event be liable for any damages in excess of the purchase price of the defective product. MER-KRETE SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES.

Warranty constitutes the sole and exclusive warranty given by Mer-Krete in connection with this product, and Mer-Krete has authorized no person to make or give any other warranties, or representations, oral or written, on its behalf. IN PARTICULAR, THERE ARE NO IMPLIED WARRANTIES, INCLUDING WITHOUT EXCEPTION, WARRANTIES, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No modification of this warranty in favor of any buyer shall be valid unless given in writing and signed by an officer of Mer-Krete.

## 8. MAINTENANCE

General cleaning with soap and water is all that is required.

## 9. TECHNICAL SERVICES

Mer-Krete Systems maintains technical field representatives available throughout the country. Call (800) 851-6303 for the nearest representative.

## 10. FILING SYSTEMS

Mer-Krete Architectural Product Catalog and CD Rom.

[www.merkrete.com](http://www.merkrete.com)

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