



PRODUCT INFORMATION

epoxyplus
Non-staining epoxy grout

EPOXYPLUS is the latest advancement in non-staining technology. Specially formulated with 100% solid epoxy resins and hardeners, **EPOXYPLUS** uses integrally colored quartz fillers, which eliminates pigment staining of tiles, typical of traditional cement and epoxy grouts and joint fillers. It can be used for setting and grouting ceramic tile, pavers, marble and stone over a variety of substrates.

TEXTURE:

Epoxy resin, hardener, colored silica.

COLORS:

18 available colors (see grout color guide).

PACKAGING:

1 and 2 gallon pails.

BASIC USE

> It can be used for setting and grouting ceramic tile, pavers, marble and stone over a variety of substrates.

AREA OF USE

> Suitable backing, when properly prepared, includes plumb and true masonry concrete, cured portland cement mortar beds, brick, ceramic tile, glass mesh, mortar units, steel, glass and fiberglass.

> Use in dry interior areas with substrates that include gypsum board and exterior grade plywood.

> Areas of use include industrial paint production, chemical and food processing 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, countertops, back-splashes, tub and shower areas, sunken tile tubs and swimming pools. Use **EPOXYPLUS** when installing certain red, green marbles and other moisture sensitive stones.

BENEFITS

> This epoxy mortar does not contain water like standard thinset mortars and will not cause warping.

LIMITATIONS

> **EPOXYPLUS** should not be used in an environment above 250°F for any extended periods 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. Some soft glazed tiles and polished marble may be scratched when grouting with **EPOXYPLUS**. Install a small test area to determine results. Keep from freezing.

APPLICABLE STANDARDS

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

Technical Data: EPOXYPLUS

TEST	REQUIREMENT	TYPICAL VALUES
Water cleanability	80 minutes	90 minutes
Initial set at 75°F	> 2 hours	> 5 hours
Shrinkage - 7 days	< 0.25%	< 0.25%
Sag (vertical joint)	NONE	NONE
Bond strength (psi) Vitreous tile 14 days	> 1000	> 1200
Compressive strength (psi) - 7 days	> 3500	> 7000
Tensile strength (psi) - 7 days	> 1000	> 2000

INSTALLATION: PREPARATORY WORK

All surfaces in which tiles are to be set must be dry, structurally sound and not subject to temperatures below 65 °F. Detailed installation procedures and use of epoxy mortars may be found in the TCNA Handbook under F-143, F-131, TR 711, TR 912 and 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 anti-fracture 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 troweled concrete floor should be roughened to insure a superior bond. Dry porous concrete should not be predampened with water before applying **EPOXYPLUS** mortar. Instead skim-coat a thin layer of **EPOXYPLUS** mortar first, then apply sufficient mortar to be notched.



OVER TILE



OVER CONCRETE



MILDEW RESISTANT



INTERIOR / EXTERIOR WALLS / FLOORS



OVER METAL



OVER PLYWOOD

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 **EPOXYPLUS** should be exterior grade plywood only, secured with screw type nails at 6-in. on centers along the edges and 8-in. on 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 **EPOXYPLUS** 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, aluminium, metal, 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 absolutely essential that the existing surface be structurally sound and firmly attached to the supporting structure.

EXPANSION JOINTS

Install expansion joints around all perimeters of restraining surfaces where possible to allow for expansion movement. Never bridge an expansion, contraction or construction joint. See EJ171 in TCNA Handbook for detailed specifications.

MIXING

Pour part A (2 lb) and B (1 lb) resin liquids into a clean mixing pail and mix thoroughly. Add the entire content of part C, color filler 10 lb 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 be of 1/16" for ceramic mosaic tile to 3/32" for quarry tile. Temperature affects working 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.

SETTING COVERAGES

Square feet per 1 Gallon

Product	3/16" x 1/4" V-Notch	1/4" x 1/4" Square Notch36
EPOXYPLUS	36	22

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 white nylon scrub 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 **EPOXYPLUS** 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.

CURING

After application, protect setting and grouting material for one day from light traffic and three days from heavy traffic. Protect the grout from harsh cleaners and chemical attack for the first 14 days. Initial maintenance for the first 7 days shall be done with clean water or a solution of Tri-Sodium Phosphate (TSP) only. The day following grouting, if haze is present, it must be removed with clean warm water or a solution of TSP.

COVERAGE CHART

Tile size	Joint width	sq ft / unit	
		1 Gal	2 Gal
4 1/4" x 4 1/4" x 5/16"	1/16"	178	356
1" x 1" x 1/4"	1/8"	31	62
2" x 2" x 1/4"	1/8"	56	112
4" x 4" x 3/8"	1/4"	37	74
4" x 4" x 1/2"	1/4"	28	56
	3/8"	20	40
6" x 6" x 5/16"	1/16"	250	500
6" x 6" x 1/2"	1/4"	41	82
	3/8"	28	56
3 7/8" x 8" x 3/8"	1/4"	48	96
3 7/8" x 8" x 1 3/8"	1/4"	13	26
12" x 12" x 3/8"	1/16"	414	828
	1/8"	209	418
	1/4"	106	212
13" x 13" x 3/8"	1/8"	226	452
	1/4"	114	228
16" x 16" x 3/8"	1/8"	277	554
	1/4"	140	280
18" x 18" x 3/8"	1/8"	311	622
	1/4"	157	314
20" x 20" x 3/8"	1/8"	345	690
	1/4"	174	348
12" x 24" x 3/8"	1/8"	277	554
	1/4"	140	280
24" x 24" x 3/8"	1/8"	414	828
	1/4"	209	418

NOTE: This chart is only for estimating how much product is needed for a given tile installation. These figures are based on filling joints to their full depth with no waste and may vary depending on the installation conditions, method and tools used.

STORAGE LIFE

One year if kept in sealed containers. Store under shelter, protect from freeze.

SAFETY - CAUTION: May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains portland cement. If any cement or cement mixtures get into eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water.

KEEP OUT OF REACH OF CHILDREN

GUARANTEE: The recommendations, suggestions, statements and technical data in this bulletin are based on our best knowledge. They are given for informational purposes only and without any responsibility for their use. The responsibility for the seller and manufacturer is only to replace that portion of the product of this manufacturer, which proves to be defective due to the quality of the ingredients or the manufacturing process itself. However, since handling and use is beyond our control, we do not guarantee the results to be obtained. Only written statements signed by an officer of the manufacturer are binding on the manufacturer or seller. Nothing in this bulletin should be interpreted as a recommendation for a use, which violates any patent rights.