

# COLORSET EPOXY 931

## Chemical Resistant Water Cleanable Tile Setting and Grouting Epoxy

### PRODUCT DESCRIPTION

COLORSET EPOXY is a patented 100% solids blend of epoxies and silica fillers. It is to be used for the setting and grouting of ceramic tile and pavers over a wide variety of substrates, interior or exterior. It produces a mortar that is stain resistant, impermeable and high in strength and shock resistant. COLORSET EPOXY has exceptionally high resistance to acids, alkalies and most solvents.

#### ▶ BASIC USE

COLORSET EPOXY can be used as both a setting and grouting mortar for virtually any tile available, including green marble. It may be used for both floor or wall installations in a mortar as thin as 1/16" to 1/8" (1.6 mm to 3.2 mm) after tiles have been properly embedded. It is water cleanable before curing, non-flammable and easy to work. COLORSET EPOXY is not affected by prolonged contact with water, but does not necessarily form a waterproof barrier unless special precautions are taken to maintain a continuous film of epoxy mortar 3/32" (2.4 mm) thick with no gaps.

#### ▶ AREA OF USE

Suitable backings, when properly prepared, include plumb and true masonry, concrete, cured Portland cement mortar beds, brick, ceramic tile, cementitious backer 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 and textile and metal finishing plants, where the use of acids, alkalies, 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—countertops, backsplashes, tub and shower areas, sunken tile tubs and swimming pools—requiring a completely waterproof system.

#### ▶ LIMITATIONS

COLORSET EPOXY should not be used in an environment with requirements above 250°F (121°C) for any extended period of time and must be mixed and used exactly as directed on labels. When used to install tile in an area that will be continually wet (e.g. swimming pools, gang showers, etc.), it is recommended that the complete installation shall be cured a minimum of three (3) days prior to water exposure. A thoroughly dry, full cure of 14 days is necessary prior to full submersion with chemically treated water.

COLORSET EPOXY shall be tested for possible staining or slight color changes when used with porous, absorptive, textured tile and stone units such as rough textured ceramic tile, natural stone or marble.

#### ▶ APPLICABLE STANDARDS

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

**Colors**—16 standard colors providing 125 variations in the one gallon size.

**Texture**—Two components (A & B) consisting of paste-like materials. Colored curing agent (hardener, Part A) and a liquid resin/silica sand (Part B) packaged by weight to form a plastic mortar when combined.

C-Cure's COLORSET 931 is protected under the rights and privileges of U.S. patent #5362322.

#### ▶ PACKAGING

**Contractor Unit Consists of**—Part A: one (1) 2.25 lb. (1.02 Kg) container of pigmented liquid epoxy hardener; **PLUS** Part B: one (1) 25.2 lb. (11.43 Kg) liquid epoxy resin combined with silica filler.

**1 Gal. (3.8L) Unit Consists of**—Part A: two (2) 0.6 lb. (0.28 Kg) containers of pigmented liquid epoxy hardener **PLUS** Part B: one (1) 12.6 lb. (5.72 Kg) container of liquid epoxy resin combined with silica filler.

**1/2 Gal. (1.9L) Unit Consists of**—Part A: one (1) 0.6 lb. (0.28 Kg) container of pigmented liquid epoxy hardener **PLUS** Part B: one (1) 6.3 lb. (2.86 Kg) container of liquid epoxy resin combined with silica filler.

### INSTALLATION

#### ▶ PREPARATORY WORK

All surfaces on which tiles are to be set must be dry, structurally sound, and not subject to temperatures below 65°F (18°C) or above 95°F (35°C). Detailed installation procedures and use of epoxy mortars may be found in the T.C.A. Handbook under F-114, F-115, F-116, F-143, F-131, F-132, TR-911 and TR-912 and in addition, in ANSI A108.6. Surfaces must be dry and free of all grease, oil, dirt, dust, curing compounds, sealers, coating, efflorescence, old adhesive residues, gypsum based underlayers and any other foreign matter.

#### ▶ CEMENTITIOUS SUBSTRATES

Cleaning may be accomplished via mechanical sanding, scraping or chipping. Surfaces may be cleaned with muriatic acid if thoroughly flushed and neutralized. (Use proper precautions.) Smooth, steel troweled concrete floors must be roughened to ensure a superior bond. Dry porous concrete **should not** be pre-dampened with water before applying COLORSET 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 deflection not to exceed 1/360th of the span, including live and dead load. Further, the flooring to receive the COLORSET EPOXY mortar should be exterior grade plywood only, secured with screw-type nails and glued where possible.

A gap of 3/16" (4.8 mm) shall be left between sheets of plywood and between the plywood edges and all materials which they abut to allow for expansion. During application, force epoxy between edges of plywood sheets to completely fill the gaps. Treat perimeters and abutments as expansion joints. In addition, all wooden surfaces must be for interior use only and protected from exposure to water.

#### ▶ MISCELLANEOUS SUBSTRATES

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

#### ▶ EXPANSION JOINTS

Expansion joints shall be installed in accordance with local building codes. See EJ171 in T.C.A. Handbook for detailed specifications. Expansion joints, control joints and cold joints shall never be bridged with setting material.

#### ▶ MIXING

For all units, open Part B and stir to eliminate the effects of settling due to shipping. Add the **entire** contents of the pigment Part A to Part B and stir to produce a homogeneous consistency eliminating any color streaks from appearing in the mixed unit. 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 overmix as this will cause the epoxy to flash set.

#### ▶ APPLICATION FOR SETTING

Spread mortar with flat side of trowel to key into 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 the tile and a subsequent mortar bed of 1/16" (1.6 mm) for ceramic mosaic tile to 1/8" (3.2 mm) for quarry tile. Temperature affects set 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 75°F (24°C). Pot life is approximately 45 minutes at 75°F (24°C). It is also required that tiles be embedded to obtain good transfer of mortar to tile and for proper alignment. Should epoxy mortar get on surface of tile, it will be necessary to remove it with a damp sponge before it cures.

**NOTE:** As a practical test, it is recommended that three (3) or more separate 12" square (.3m<sup>2</sup>) 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 (3) to seven (7) 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. Grout and grout residue should not be allowed

to cure on unintended surfaces (e.g. painted, wall papered, carpeted, wood, concrete, masonry and stucco surfaces).

► APPLICATION FOR GROUTING

Allow tiles to set firmly before grouting (1 - 2 days). Mix grouting mortar in same fashion as outlined for setting mortar. Remove grout from container and spread out over surface to be grouted as soon as mixing is completed. Apply grout using a hard rubber float filling all joints full and evenly with surface of tile. Grout vertical surfaces as soon as possible after mixing. Remove all excess epoxy from surface of tile with the rubber float before it begins to set by turning the float perpendicular to the tile surface and using it as a squeegee. Clean the remaining grout off the surface of the tile using clean water only (e.g. do not use any acid based products) and a Scotch-Brite™ pad or a stiff sponge with rounded edges. Special care should be taken to avoid removing excessive material from the grout joint during cleaning as COLORSET EPOXY will still be very soft. As a final step, clean any remaining film off the tile surface by dragging with a clean, damp terry cloth towel.

NOTE: On porous or rough tiles, sealing with a grout release may be necessary to prevent staining. Try a test patch to be sure. Epoxy and epoxy wash residue should not be allowed to dry on painted, anodized and thin metal-plated surfaces. Clean uncured materials from these surfaces immediately with soap and water.

► CURING

Protect setting material and grout one (1) day from light traffic and three (3) days from heavy traffic. Protect from harsh industrial cleaners for seven (7) days and from chemicals for 14 days. Initial maintenance for the first seven (7) days shall be accomplished using clean water only. If haze is present the day following grouting, it must be removed with clean water only. All grouting and cleaning should be completed within 80 minutes.

► WARRANTY

COLORSET EPOXY is included in C-Cure's Five Year System Warranty. For terms and conditions see Warranty Information sheet #WRTDS.

**GUARANTEE**

The recommendations, suggestions, statements and technical data are based on the best knowledge available to C-Cure and are given for informational purposes ONLY and without any responsibility for their use.

C-Cure MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE PRODUCT SOLD HEREIN except that the quality of the ingredients shall be in accordance with C-Cure specifications. It is expressly understood and agreed that the buyer's sole and exclusive remedy shall be replacement of defective products and under no circumstances shall C-Cure be liable for incidental or consequential damages. C-Cure neither assumes nor authorizes any others to assume for it any liability with respect to furnishing of the product. Handling and use of the product are beyond the control of C-Cure, therefore, no warranty is made, expressed or implied, as to the results obtained from the use of the product or against any claims for infringement of patents resulting from the use of the product.

This writing constitutes a complete and exclusive statement of the understanding between C-Cure and buyer. There were no oral agreements or warranties, expressed or implied, collateral to or affecting the furnishing of the product. This understanding shall not be modified except in writing by an officer of C-Cure.

# COLORSET EPOXY 931

## Chemical Resistant Water Cleanable Tile Setting and Grouting Epoxy

COLORSET 931 TECHNICAL DATA			
TEST		REQUIREMENT	TYPICAL VALUES
A. Water Cleanability		80 Minutes	>80 Minutes
B. Initial Set at 75°F (24°C)		>2 1/2 Hours	2 3/4 Hours
C. Shrinkage	7 Days	<0.25%	<0.20%
D. Sag (Vertical joint)		NONE	NONE
E. Bond Strength Vitreous Tile	14 Days	>1000 psi (70.3 Kg/cm <sup>2</sup> )	>1800 psi (126.6 Kg/cm <sup>2</sup> )
F. Compressive Strength	7 Days	>3500 psi (246.1 Kg/cm <sup>2</sup> )	>10,000 psi (703.2 Kg/cm <sup>2</sup> )
G. Tensile Strength	7 Days	>1000 psi (70.3 Kg/cm <sup>2</sup> )	>2,500 psi (175.8 Kg/cm <sup>2</sup> )
H. Thermal Shock	7 Days	>500 psi (35.2 Kg/cm <sup>2</sup> )	>950 psi (66.8 Kg/cm <sup>2</sup> )
I. Chemical Resistance — Excellent for most solvents, acids, and alkalis. C-Cure can provide specific chemical resistance on request.			
J. 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. For continuous work, wear rubber gloves or other protective clothing as required. Avoid contact with skin where possible and wash exposed skin areas promptly with water.			
KEEP OUT OF REACH OF CHILDREN.			
K. Storage Life — One year if kept in sealed containers. Keep from freezing.			

SETTING COVERAGES		
PRODUCT	SQUARE FEET (M <sup>2</sup> ) PER 1 GALLON (3.78 L) OF COLORSET EPOXY	
	3/16" x 1/4" (4.8mm x 6.4mm) V-Notched Trowel	1/4" x 1/4" (6.4mm x 6.4mm) Square-Notched Trowel
COLORSET EPOXY 931	36 sq. ft. (3.34m <sup>2</sup> )	22 sq. ft. (2.04m <sup>2</sup> )

GROUT COVERAGE REQUIREMENTS					
TILE TYPE	TILE SIZE	JOINT WIDTH	NUMBER OF UNITS OF COLORSET EPOXY REQUIRED PER 100 SQ. FT. (9.29 M <sup>2</sup> )		
			1/2 Gal. (1.9L)	1 Gal. (3.8L)	2 Gal. (7.6L)
Wall Tile	4 1/4" x 4 1/4" x 5/16"	1/16" (1.6 mm)	1.1	0.6	0.3
Ceramics	1" x 1" x 1/4"	1/8" (3.2 mm)	6.5	3.3	1.6
	1" x 2" x 1/4"	1/8" (3.2 mm)	5.1	2.5	1.3
	2" x 2" x 1/4"	1/8" (3.2 mm)	3.6	1.8	0.9
Floor Tile	4" x 4" x 1/2"	1/4" (6.4 mm)	7.1	3.6	1.8
		3/8" (9.5 mm)	10.2	5.1	2.6
	4" x 8" x 1/2"	1/4" (6.4 mm)	5.4	2.7	1.4
		3/8" (9.5 mm)	7.8	3.9	2.0
	6" x 6" x 1/2"	1/4" (6.4 mm)	4.8	2.4	1.2
		3/8" (9.5 mm)	7.1	3.6	1.8
	8" x 8" x 3/8"	1/4" (6.4 mm)	2.8	1.4	0.7
		3/8" (9.5 mm)	4.1	2.1	1.1
	10" x 10" x 3/8"	1/4" (6.4 mm)	2.3	1.1	0.6
		3/8" (9.5 mm)	3.3	1.7	0.9
	12" x 12" x 3/8"	1/4" (6.4 mm)	1.9	0.9	0.5
		3/8" (9.5 mm)	2.8	1.4	0.7
13" x 13" x 3/8"	1/4" (6.4 mm)	1.6	0.8	0.4	
	3/8" (9.5 mm)	2.6	1.3	0.7	
16" x 16" x 3/8"	1/4" (6.4 mm)	1.5	0.7	0.4	
	3/8" (9.5 mm)	2.0	1.0	0.5	
Floor Brick	3 7/8" x 8" x 3/4"	1/4" (6.4 mm)	8.0	4.0	2.0
	3 7/8" x 8" x 1 3/8"	1/4" (6.4 mm)	15.0	7.5	3.8

This chart is for estimating how much product is needed for a given tile installation. These figures are based on filling the joints to their full depth with no waste.

Members of National Tile Contractors Association, Materials & Methods Standards Association, Ceramic Tile Distributors Association.

NOTICE: The information in this bulletin is presented in good faith, but no warranty, express or implied, is given nor is freedom from any patent. In as much as any assistance furnished by C-Cure with reference to the safe use and disposal of its products is provided without charge, C-Cure assumes no obligation or liability therefore, except to the extent that any such assistance shall be given in good faith.

**C-CURE**  
 Seal Beach, CA 90740  
 800-895-2874  
 www.c-cure.com

# COLORSET EPOXY 931 SYSTEM

## 125 COLOR GUIDE

### COLORSET EPOXY 931 Patented System

- Chemical Resistant
- Water Cleanable
- 16 Standard Colors
- 125 Color Variations
- Easy Clean Up
- Highly Stain Resistant
- Color Uniformity

Patent #5362322

[Click here to view the color guide](#)

**DESCRIPTION:** ColorSet Epoxy is a patented, multi-component 100% solids blend of epoxies and silica fillers for the setting and grouting of ceramic tile, pavers and quarry tiles over a wide variety of substrates subjected to flexing, vibration and heavy usage. ColorSet Epoxy produces exceptionally high bond strengths with resistance to acids, alkalies and most solvents.

As a grouting material, ColorSet Epoxy is applied and cleaned easily, and produces a highly stain resistant grout joint with vivid colors. ColorSet Epoxy meets the requirements for ANSI A118.3 and ANSI A108.6.

**AREAS OF USE:** ColorSet Epoxy can be used as both a setting and grouting material for virtually any tile. It may be used for both floor and wall installations over masonry, brick, steel and tile surfaces provided they are structurally sound, clean and free of any sealers, curing compounds, oils or coatings.

The temperature of the substrate, the tile and the ColorSet Epoxy must be between 65° F and 95° F for the setting and grouting, and must remain at this range for 72 hours after installation. In dry areas, exterior grade plywood surfaces may be adhered to if structurally sound. Full installation details may be found in the T.C.A. Handbook and the [C-Cure ColorSet Epoxy 931 product data sheet](#).

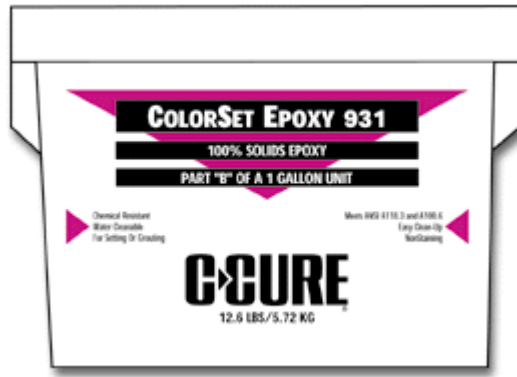
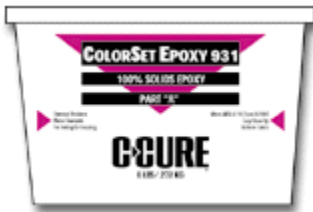
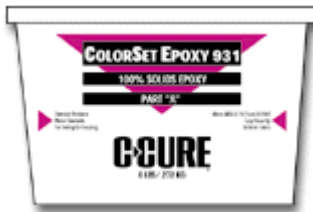
Coverage Chart							
SETTING REQUIREMENTS							
PRODUCT		TROWEL SIZE		SQUARE FEET (M <sup>2</sup> ) PER GALLON OF COLORSET EPOXY			
COLORSET EPOXY		3/16" X 1/4" V-NOTCH		36 ft <sup>2</sup> (3.34m <sup>2</sup> )			
		1/4" x 1/4" SQUARE NOTCH		22 ft <sup>2</sup> (2.04m <sup>2</sup> )			
GROUT REQUIREMENTS							
TILE TYPE	TILE SIZE	JOINT WIDTH	NUMBER OF COLORSET EPOXY UNITS REQUIRED PER 100 SQ. FT.- 1 GAL. (3.78IL)	TILE TYPE	TILE SIZE	JOINT WIDTH	NUMBER OF COLORSET EPOXY UNITS REQUIRED PER 100 SQ. FT.- 1 GAL. (3.78IL)
				Floor Tile	4" x 4" x 1/2"	1/4"	3.6

Wall Tile	4-1/4" x 4-1/4" x 5/16"	1/16"	0.6		4" x 4" x 1/2"	3/8"	5.1
Ceramics	1" x 1" x 1/4"	1/8"	3.3		4" x 8" x 1/2"	1/4"	2.7
	1" x 2" x 1/4"	1/8"	2.5		4" x 8" x 1/2"	3/8"	3.9
	2" x 2" x 1/4"	1/8"	1.8		6" x 6" x 1/2"	1/4"	2.4
					6" x 6" x 1/2"	3/8"	3.6
Floor Brick					8" x 8" x 3/8"	1/4"	1.4
	3-7/8" x 8" x 3/4"	1/4"	4.0		8" x 8" x 3/8"	3/8"	2.1
	3-7/8" x 8" x 1-3/8"	1/4"	7.5		10" x 10" x 3/8"	1/4"	1.1
					10" x 10" x 3/8"	3/8"	1.7
					12" x 12" x 3/8"	1/4"	0.9
				12" x 12" x 3/8"	3/8"	1.4	

This chart is for estimating how much product is needed for a given tile installation. These figures are based on filling the joints to their full depth with no waste.

## ONE GALLON MIXING INSTRUCTIONS

- 1) Select a Color ([click here to view the color guide](#))
- 2) The numbers listed below the color indicate the combination of equal part A's required to be added to part B.



**PART A** +  
**.6 LB (.272 kg)**

**PART A** +  
**.6 LB (.272 kg)**

**PART B** =  
**12.6 LB (5.72 kg)**

**= 1 GALLON UNIT**  
**(3.78 L)**

C-Cure  
Seal Beach, CA 90740  
(800) 895-2874

**BACK**  
to instructions



200 Dover White



164 Silver King



165 English Ivy



166 Wild Ginger



167 Azalea



168 Wild Onion



169 Tulip



170 Bluebonnet



171 Sunflower



172 Holly



173 Honeysuckle



174 Arrowwood



175 Buckwheat



176 Cattail