



S-600 100% Solid Epoxy Admix For Summitville Cement Grouts

PRODUCT DESCRIPTION:

S-600 is a three part 100% solid epoxy compound for setting and grouting of floor brick, quarry tile, porcelain, pavers and ceramic mosaics. It is designed to resist attacks by many acids, alkalis and other chemical compounds that normally break down concrete mortars and grouts. S-600 has been designed to be mixed with any of the colors of S-700 and S-710 sanded grout or S-667 un-sanded grout. Since S-600 changes the base color, please check color samples to insure desired color results. S-600 is recommended for use in commercial and residential kitchens, chemical laboratories, breweries, dairies, food processing plants, etc. where high exposure levels of organic acids are not present. S-600 is sag resistant and should be specified for setting or grouting ceramic tile on any wall or floor installations. S-600 not only has exceptional bond strength (greater than 1000 P.S.I.) but it will remain rigid and cohesive at temperatures up to 350°F.

WORKING CHARACTERISTICS:

S-600 is ideally installed at temperatures from 70° to 80°F. At higher temperatures, the pot life, open time and clean-up time are reduced; however, it is more fluid and easier to work. At lower temperatures these factors are reversed. Working surface temperatures can vary from room temperature and should be taken into consideration. Do not begin application of S-600 until the temperature of the room and substrate is above 50° F and rising. Maintain a temperature of 60°F or higher during the curing period. S-600 may be stored at low temperatures. Before use, S-600 and the cement filler must be stored at approximately 70° F for at least 24 hours.

Temperature	Pot Life	Open Time	Clean-up Time	Set Time
60°F (16° C)	1 ½ hours	3 ½ hours	1 ½ hours	24-30 hours
75°F (24° C)	1 hour	2 ¼ hours	1 hour	16-24 hours
90°F (32° C)	½ hour	1 ½ hours	½ hour	12-14 hours

High humidity inhibits cure speed.

Surfaces: Recommended for use on all normal surfaces including plywood. Surface to receive S-600 must be structurally sound, dry and free of sealers, coatings, oil, dirt and dust. New masonry surfaces should be sufficiently cured to comply with preceding conditions. It is advisable to brush all surfaces with a stiff brush to remove any loose material that may be encountered. Consult the [Tile Council of North America Handbook for Ceramic Tile Installations](#), ANSI A-108, and any other applicable standards for specific setting descriptions.

Mixing: S-600 is furnished in 2 parts and requires a bag of S-700, S-710, or S-667 as part “C”, the filler/colorant. Exact proportioning and thorough mixing of the parts with one another is absolutely essential for satisfactory curing and performance. Before weighing from containers, mix each part thoroughly to ensure uniformity within the part. Empty contents of part A and B into mixing bucket and mix to uniform color and consistency. Gradually add part C powder and mix thoroughly using either hand tools or a slow spin power mixer. (e.g. bucket mixer) Mix until all part C is uniformly wetted, smooth and free of lumps. Care must be taken to avoid whipping air into this mix. It is recommended that complete units be mixed at a time; however, if necessary to split a unit, weigh out three parts A, one part B, and 8 parts of S-700 or S-710 as part C (by weight, not by volume). If mixing S-600 with S-667, use 4 parts of S-667 to three parts A, one part B (by weight, not by volume). Clean tools with warm soapy water immediately after use.

Mixing Ratio:

Mix a 25 lb. bag of S-700 or S-710 with a 3-gallon unit.

Mix a 9 lb. container of S-700 or S-710 with a 1-gallon unit.

Mix 12 ½ lbs. of S-667 with a 3-gallon S-600 unit.

Mix 4 lbs. of S-667 with a 1-gallon unit of S-600.

Mixing S-667 with S-600 will result in lower coverage than 710 or 700 due to smaller part C powder size required for joints smaller than 1/8". Check coverage charts.

VERTICAL SURFACES:

All vertical work must be completed within 20 minutes of mixing product at 70°F. Lower temperatures may result in longer work times and higher temperatures will result in shorter work times.

If manufacturer's date is over 1 year, S-30 should be added. If necessary, add up to 0.2 lbs of S-30 per 3-gallon unit. Mix S-30 into part A of the epoxy a minimum of 8 hours before use.

Working Characteristics: S-600 is ideally installed at temperatures from 70° to 80°F. At higher temperatures, the pot life, open time and clean up time are reduced; however, it is more fluid and easier to work. At lower temperatures, these factors are reversed. Working surface temperature can vary from room temperature and should be taken into consideration. Do not begin application of S-600 until the temperature of the room and substrate is above 50°F and rising. Maintain a temperature of 60°F or higher during the curing period. S-600 may be stored at low temperatures. Material must be stored at approximately 70°F for at least 24 hours before using. Depending upon storage and packaging practices, normalizing time may be significantly longer. Once the S-600 begins to set (become soupy, lose tackiness and or becomes stiff), it should be discarded, as proper bonding will not be accomplished.

As a Setting Mortar:

Full coverage of the setting material on the back of the tile is desirable to prevent broken and cracked tile. The National Tile Contractors Association recommendation to accomplish full coverage is as follows: Apply mortar to substrate using the flat side of the trowel to fill any voids and "key" the material to the substrate. Using the proper sized notched trowel, comb the mortar evenly in one direction only. Do not "swirl". Set the tile in the mortar with the edge of the tile parallel to the comb lines. To remove air voids, push the tile back and forth in the mortar perpendicular to the comb lines. Per ANSI guidelines, check for proper bond by removing a freshly set tile from the mortar and verifying proper adhesive transfer and coverage every few tiles.

Spread mixed S-600 with a notched trowel, then set tile. Use a 1/8" notched trowel for ceramic mosaics to achieve a 1/16" bed. Use a ¼" notched trowel for smooth or shallow ribbed pavers providing a finished bed of 1/8". Use a ¼" x 3/8" square notched trowel for heavy ribbed back tile such as quarry tile. Once the S-600 begins to set, it should be discarded, as proper bonding will not be accomplished. Allow 16 hours at 75°F to elapse before grouting tile.

As A Grout: With a firm straight edge rubber trowel (*Gundlach GK-2, Barwalt UFF 1B or similar*) force as much S-600 into joints as possible, using sufficient pressure and flow to avoid air pockets or voids. Before the S-600 loses its plasticity, remove excess with rubber trowel or small squeegee in a squeegee/scraping fashion working diagonally across joints to facilitate removal without pulling material from joints.

CLEAN-UP:

For initial clean up: Use a white plastic scrub pad or an epoxy sponge and a sufficient amount of clean water. Avoid water migration into un-grouted joints. Warm water with a small amount of SL-86 added will speed clean up. Change cleaning water and scrub pads/sponges often to avoid leaving a sticky film on the tile. Do not leave standing water on uncured epoxy joints after initial cleaning. At 70°F, perform final clean up after 10 hours but before 24 hours. Use a white scrub pad or an epoxy sponge with SL-86 and water. Clean completely, as S-600 is difficult to remove after it cures for over 24 hours. Wide tile joints may have a slight concave appearance after grout cure. Cover with Kraft paper after final clean up to protect from other construction debris during cure period. SL-100 may be used to remove cured epoxy residue.

CAUTION:

Protect from dirt and all traffic for 16 hours, heavy traffic and dirt for 48 hours. Do not grout in direct sunlight. Cure S-600 a minimum of seven days at 70°F before chemical exposure.

PROTECTING NEW TILE WORK:

To avoid damage to finished tilework, schedule floor installations to begin only after all structural work, building enclosure, and overhead finishing work, such as ceilings, painting, mechanical and electrical work are completed. Keep all traffic off finished tile floors until it has fully cured or provide up to ¾" thick plywood protection over Kraft paper to protect floors before installation materials have fully cured.

PACKAGING:

A one-gallon unit requires 8 pounds of S-700 or S-710, or 4 pounds of S-667 as part C filler. A three-gallon unit requires a 25-pound bag of S-700 or S-710, or 12.5 pounds of S-667 as part C filler.

COLORS:

See S-710, S700, and S-667 color listings. Cement based grouts mixed with S-600 will not be the same color as cement based grouts mixed with water or latex. Check color samples as colors can be very different.

SPECIFICATIONS:

Material: Setting mortar and tile grout shall be S-600, a three-component mix consisting of specially graded silica aggregate (#7 on M.O.H. Scale of Hardness), color-fast pigments, a special blend of activating hardeners and liquid epoxy resin. It shall be free of water and organic solvents; as manufactured by Summitville Tiles, Inc., Summitville, Ohio. The material when properly mixed and applied shall resist sag on vertical surfaces. In the reacted state, S-600 shall remain rigid and cohesive in intermittent temperatures up to 350°F. Acid and alkali resistant epoxy mortar and grout shall meet or exceed ANSI A118.3.

Color: Color shall be #_____.