

SPECCRETE® 14K GROUT CONTROLLED EXPANSION HIGH STRENGTH GROUT

PRODUCT DESCRIPTION: Speccrete® 14K Grout is a pre-blended, non-shrink, non-ferrous, high strength multiple use material, which can be mixed from dry pack to flowable consistencies. Some common grouting applications for Speccrete® 14K Grout include: structural columns, pump equipment and machinery bases, bearing plates, dowel and rebar placements, rail posts, seating bolts, precast tee joints and post tension cables.

BENEFITS: HIGH EARLY COMPRESSIVE STRENGTHS...IDEAL FOR HEAVY LOADS...EARLY LOADING PROVIDES REDUCED DOWNTIMES... CONTROLLED EXPANSION...MAY BE USED FROM DRY PACK TO FLOWABLE...CONTAINS NO ADDED CHLORIDES, IRON OR GYPSUM COMPONENTS...CAN BE USED IN WET ENVIRONMENTS

COMPOSITION: Portland/calcium sulfo-aluminate based cements, selected aggregates and chemical additives. This product contains no calcium chloride or added chlorides that contribute to reinforcement steel corrosion.

TECHNICAL DATA: Speccrete® 14K Grout complies with ASTM C-1107 Grade B, CRD C-621, ASTM C109, ASTM C-348, CRD -C588, CRD C-226, CRD C-266, ASTM C-588, AASHTO T-161B.

WORKING & PERFORMANCE PROPERTIES @ FLOWABLE CONSISTENCY / 70°F (21°C) (APPROXIMATE):	
Yield per 50 lb. / 22.68 kg Bag*:	0.43 cubic feet / 0.021 cubic meters
Initial Set per CRD C-C82:	84 Minutes
Final Set per CRD C-C82:	135 Minutes

*One 50 lb. bag yields a minimum of 0.40 cu. ft. (0.011cu. m) depending on selected final consistency

COMPRESSIVE STRENGTH PER ASTM C-109	PLASTIC-MINIMUM FLOW PER ASTM C-1437	FLOWABLE-MODERATE FLOW PER ASTM C-1437	FLUID-HIGH FLOW PER ASTM C-939
1 day	9700 psi 67.90 mpa	8880 psi 62.16 mpa	8250 psi 57.75 mpa
3 days	10200 psi 71.40 mpa	9350 psi 65.45 mpa	8700 psi 60.90 mpa
7 days	12800 psi 89.60 mpa	9810 psi 68.67 mpa	9300 psi 65.10 mpa
28 days	14100 psi 98.70 mpa	12480 psi 87.35 mpa	11600 psi 81.20 mpa

HEIGHT/ LENGTH CHANGE OF MOIST CURED HARDENED GROUT PER ASTM C-1090/ C157:	RESULT:	ASTM C-1107 SPECIFICATIONS:
1 day	+0.05	+0.30 max.%,0.0 min.%
3 days	+0.05	+0.30 max.%,0.0 min.%
14 days	+0.03	+0.30 max.%,0.0 min.%
28 days	+0.02	+0.30 max.%,0.0 min.%
56 days	Currently being run	-
EARLY AGE HEIGHTS CHANGE % AT FINAL SET PER ASTM C-827:	+0.20	+4.0% max.

DIRECTIONS FOR USE: All areas to be grouted or patched shall be clean and free of oil, grease, dirt and all contaminants. All metal components shall be free of rust, paint or oils. Thoroughly saturate the area to be grouted with potable water prior to the placement of Speccrete® 14K Grout. Remove excess water from holes and voids just prior to grout placement. Where required, air relief openings shall be provided to avoid entrapment of air. Forms for base plates and machinery bases should be set to allow for rapid and continuous placement and complete filling of the space to be grouted. Wooden surfaces that can absorb moisture should be pre-treated with form oil. Support elements should be anchored so that no movement is possible. Edges of concrete to be grouted which are less than one inch deep shall be cut back to form a uniform butt. Forms should be tight and left in place for the positive expansion of the grout. Small quantities may be mixed by hand larger quantities may be mixed using a slow speed motor and paddle mixer or a rotary mixer with rubber tip blades. Speccrete® 14K Grout should be placed immediately after mixing.

RECOMMENDED WATER ADDITION PER 50 LB. BAG SPECCRETE® 14K GROUT:	
CONSISTENCY:	WATER REQUIREMENT:
Dry Pack:	2.55 quarts (2.40 liters)
Stiff:	2.75 quarts (2.60 liters)
Plastic:	3.00 quarts (2.83 liters)
Flowable:	3.54 quarts (3.34 liters)
Fluid:	4.25 quarts (4.01 liters)

NOTE-Use the minimum water necessary to achieve the required working consistency.

Speccrete® 14K Grout should be placed in accordance with ACI standard grouting procedures. Use chains, rods or tamping devices to compact grout tightly, removing all air voids. Place grout quickly and continuously. Finished Speccrete® 14K Grout should be cured by standard ACI methods. For grouting deep fills, greater than 2", Speccrete® 14K Grout may be extended with clean, washed 3/8" pea gravel in the range of 13 to 26 pounds (1-2 gallons) per 50 lb. bag. If adding dry pea gravel, additional water should be added at a rate of 0.4 gallon per gallon of aggregate. If adding "pre-wet" or damp gravel, then no additional water should be added

CAUTIONS: Mix Speccrete® 14K Grout for approximately 5 minutes. Do not mix more material than can be placed in 60 minutes. The temperature of the mixed grout should ideally be between 45° F to 70° F. Use only potable water for mixing. Clean mixing equipment between batches. When mixing Speccrete® 14K Grout, the water-to-powder ratio is very critical, do not vary the specified water amount or over water. When frothing or foaming occurs on the wet mix surface, the mix is too wet for any application. Do not re-temper. Use of any extension aggregates will alter physical properties as listed. Do not exceed a length to width ratio of 2 to 1 for the repair area. Clean mixing equipment between batches. Protect from excessive sun, low humidity, rain and wind exposure, as well as temperature extremes that could prevent inadequate curing. Do not apply to frozen, frost filled or hot surfaces. Do not apply during freezing weather unless proper heat protection preparation and methods are used to protect the repair. Refer to ACI 306.1 report "Standard Specification for Cold Weather Concreting" for recommended protection methods of concrete placement in sub-freezing temperatures. Colder temperatures will extend open time and reduce rate of strength gain. Do not add calcium chloride or other accelerator type admixtures to Speccrete® 14K Grout.

WARNINGS: Contains cement and silica, avoid inhalation of dust. Wear gloves, safety goggles, and OSHA approved dust respirator during mixing and placement. Refer to product M.S.D.S. (Material Safety Data Sheet) for additional safety information. Do not take internally. Avoid prolonged contact with skin. **FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.**

NPCS HMIS SAFETY RATINGS: HEALTH = 2, FLAMMABILITY = 0, REACTIVITY = 0, PROTECTION = E

PACKAGING: 50 lb. (22.70 kg) bags

STORAGE: 40°F to 90°F in a dry **SHELF LIFE:** 1 year properly stored

FREIGHT CLASS: Item #42130, Sub 0, LTL 50 -Cement based grouting material in bags

LIMITED WARRANTY: This product is warranted to be of merchantable quality when used according to the instruction herein. It is not warranted to be suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of the product as purchased, if found to be defective upon inspection by the manufacturer. This limited warranty is issued and accepted in lieu of all other expressed warranties and explicitly excludes liability for consequential damages. Buyer assumes all risk and liability resulting from the use of this product. Revised – 12-17-08