

# SPECPOXY 500



ASTM 881 compliant hi-mod, ultra-low viscosity epoxy injection adhesive

## DESCRIPTION

SPECPOXY 500 is a two-component, very low viscosity, moisture insensitive, high modulus, structural epoxy bonding adhesive and crack injection resin. SPECPOXY 500 is 100% solids, solvent-free, low odor, and high-strength.

- Bonding concrete, steel and wood
- Gravity feed or pressure injection crack repairs
- Anchoring bolts, dowels and reinforcing bar

## APPLICATION

**Mixing Instructions:** Air, material, and surface temperatures must be a minimum of 40°F prior to mixing or installation. To assist with mixing and dispensing, precondition material to 75°F. For bulk applications, mix two parts of component A and one part of component B by volume for three minutes with a low speed drill motor using a Jiffy mixer or paddle. Mix only as much material as can be used within the pot life. For cartridges, the resin and hardener are uniformly dispensed and mixed simultaneously through a mixing nozzle.

**Surface Preparation:** Surfaces to be bonded must be clean and structurally sound. Remove all oil, grease, dirt, laitance, curing compounds, and any other foreign matter by sandblasting, mechanical abrasion or oil free compressed air. For pressure injection, prepare the surface adjacent to the cracks to expose clean, sound concrete.

**Crack Injection:** Injection ports should be fastened to the surface of the concrete using SPECPOXY 3000 FS. The injection ports should be spaced approximately 6" to 24" apart depending upon the crack width and the thickness of the concrete. The surface of the crack should also be sealed using the SPECPOXY 3000 FS overlapping the crack approximately 1-1/2" on both sides. After the ports and crack surface have cured, inject SPECPOXY 500 with pressurized dispensing equipment or use cartridges.

**Gravity Filling:** Thoroughly remove any dust or contaminants from surface cracks with compressed air or wire brush. Pour or spread the properly mixed SpecPoxxy 500 across the surface and reapply until rejection. Remove any excess epoxy from the surface or grind excess after cured.

**Bonding:** As a structural adhesive, apply the SPECPOXY 500 neat and work into the substrate. The glue line should not exceed 1/16". (approx. 75 sq-ft per gal)

## CLEANING

**Tools and Equipment:** Uncured material can be removed with SpecChem Orange Peel Citrus Cleaner or other approved solvent. Dispose of in accordance with local, state, and federal disposal regulations. Mechanical removal is necessary for cured material.

## PACKAGING

1 gallon units; 3 gallon units; 15 gallon units; 15 oz. dual cartridge

## SHELF LIFE

Store SPECPOXY 500 in its original containers and keep tightly closed. Do not allow the accumulation of water, dirt, or other contaminants.

The shelf life of properly stored SPECPOXY 500 is two years from date of manufacture.

## STANDARDS

SPECPOXY 500 meets ASTM C-881, Type I, II, IV, and V Grade 1, Classes B & C.

## TYPICAL PROPERTIES

Mix Ratio	2 to 1
Mixed Color:	Amber
Viscosity:	180 CPS
Gel time (ASTM 881):	25 minutes
Tack free time @ 70°F:	3.5 hours

### TYPICAL CURED PROPERTIES

Initial Cure	24 hours
Final Cure	7 days
Compressive Strength (ASTM D695)	12,175 psi
Compressive Modulus (ASTM D695)	265,500 psi
Bond Strength at 2 days (ASTM 882)	2,275 psi
Bond Strength at 14 days (ASTM 882)	2,550 psi
Elongation (ASTM D638)	2.4%
Tensile Strength (ASTM D638)	7,050 psi
Water Absorption (ASTM D570)	< 0.5%
Heat Deflection (ASTM D648)	121°F



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## LIMITATIONS

Always test a small amount of SPECPOXY 500 to verify that the product has been thoroughly mixed and will harden properly before proceeding. Do not thin with any solvent. Surface and air temperatures must be a minimum of 40°F for application.

## PRECAUTIONS

Prolonged or repeated skin or eye contact may cause irritation. Use safety glasses and wear protective rubber gloves. If skin contact occurs, wash immediately with soap and water and seek medical help if needed. If eye contact occurs, flush immediately with water and seek medical help if needed. In case of ingestion, call a physician. Product is a sensitizer. Avoid breathing vapors.

### INDUSTRIAL USE ONLY

Additional precautions, safety and first aid information are contained in the Safety Data Sheet.

## WARRANTY

### NOTICE-READ CAREFULLY CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

### WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

### INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.



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