

# HI-TECH Systems

## "HT-150 SLV"

### Super Low Viscosity Epoxy Adhesive Binder

#### Product Description:

Super low viscosity for deeper penetration, high strength, two component epoxy adhesive binder. HT-150 SLV conforms to ASTM C-881, Types I and IV, Grade 1, Classes B & C. An excellent epoxy adhesive for use in crack grouting by pressure injection or gravity-feed, and as a general purpose binder for sealing many concrete slab conditions and for making epoxy patching mortars and grouts.

#### Applications:

- ✓ Pressure-injection for cracks in structural concrete, masonry, wood, etc.
- ✓ Gravity-feed of cracks in horizontal concrete and masonry.
- ✓ Epoxy resin binder for epoxy mortar patching and overlay of interior, horizontal surfaces.
- ✓ Seal interior slabs and exterior above-grade slabs for water, chlorides, mild chemical attack and to improve performance.
- ✓ Grouting bolts, dowels, pins, etc.

#### Advantages:

- ✓ Approved by City of Los Angeles for Structural Injection.
- ✓ Super Low Viscosity
- ✓ Insensitive to moisture before, during and after cure.
- ✓ Easy mix, convenient volume ratio: Mix 2 parts A to 1 part B.
- ✓ Unique, high-strength, structural adhesive for "can't dry" surfaces.
- ✓ Deep penetrating and tenacious bonding of cracks in structural concrete.
- ✓ High early strength developing adhesive.
- ✓ Excellent chemical resistance for flooring systems.

#### Performance Data:

Color (A+B)		Amber
Viscosity (mixed)		150 cps
Mix Ratio (by volume)		2:1
Pot Life 100 grams @ 77°F		30 mins
Absorption	ASTM D-570 24 hrs	0.85 %
Shrinkage	ASTM C-883	Passes
Gel Time	ASTM C-881	45 mins
Heat Deflection Temperature	ASTM D-648	120°F
Bond Strength	ASTM C-882 2 days	2,413 psi
	14 days	3,612 psi
Compressive Strength @73°F	ASTM D-695 7 days	10,685 psi
Tensile Strength @ 73°F	14 days	
	ASTM D-638	7,010 psi
Flexural Strength	ASTM D-790	9,664 psi
Shear Strength	ASTM D-732	9,040 psi

#### Coverage:

1 gal. of HT-150 SLV adhesive, when mixed with 5 gal. by loose volume of oven-dried aggregate, yields 808.5 cu. in. of epoxy mortar.

#### Shelf Life:

1 year in original unopened container.

#### Storage Conditions:

Store at 40°-95° F. Condition material to 65° – 85° F before using.

#### Pot Life:

Approx. 30 mins. (11 gram mass)

#### Appearance:

Compound A = Clear, Compound B = Amber

#### Available In:

34 oz. cartridges, 3 gallon units, 15 gallon units, and 165 gallon units.

**Concrete Application Recommendations:****Surface Preparation:**

Surface must be clean and sound. It may be dry or damp, but free of standing water. Remove dust, grease, curing compounds, waxes, foreign particles and disintegrated materials.

**Preparation Work:**

Concrete: Sandblast or use other approved mechanical means.

Steel: Sandblast to white metal finish.

**Bulk Mixing:**

For bulk mixing pre-mix each component thoroughly. Place 2 parts by volume of component A and 1 part by volume of component B into a clean pail. Mix thoroughly for 3 minutes with low speed drill (400-600 rpm) until uniformly blended. Mix only the quantity that can be used within its pot life and do not allow mixed material to reside in static mixing head or mixer for more than ten minutes or nozzle blockage may result. To prepare an epoxy mortar, slowly add 4-5 parts by loose volume of oven-dried aggregate to 1 part of the mixed *HT-150 SLV* and mix until uniform in consistency.

**Application:****To gravity feed cracks:**

Pour neat *HT-150 SLV* into vee-notched crack. Continue placement until completely filled. Seal underside of slab prior to filling if cracks reflect through.

**To pressure-inject cracks:**

Use automated injection equipment or manual methods. Set appropriate injection ports based on system used. Seal ports and cracks with HT Structural Gel or HT Structural Gel Fast. When the epoxy adhesive seal has cured, inject *HT-150 SLV* with steady pressure. Consult Technical Service for additional information.

**To seal slabs:**

Spread neat *HT-150 SLV* over slab. Allow penetration. Remove excess to prevent surface film. Seal interior slabs and above grade exterior slabs only.

**For use as an epoxy mortar:**

Prime prepared surface with neat *HT-150 SLV*. Place prepared epoxy mortar before primer becomes tack-free. Place the epoxy mortar using trowels. Compact and level with vibrating screed or trowels. Finish with finishing trowel. Exterior application may darken with ultra violet exposure.

**Limitations:**

- ✓ Minimum surface temperature 40° F. Do not thin ... solvents will prevent proper cure.
- ✓ Use oven-dried aggregate only.
- ✓ Maximum epoxy mortar thickness is 1 ½ in. per lift.
- ✓ Minimum age of concrete must be 21-28 days, depending on curing and drying conditions for mortar and to seal slabs.
- ✓ Not for injection of cracks under hydrostatic pressure.
- ✓ Do not seal exterior slabs on grade.

**Safety:**

MSDS will be mailed immediately upon receipt of a purchase order or upon request. All personnel should read and understand product Material Safety Data Sheets. Long sleeve overalls or disposable overalls, rubber gloves, splash shields, rubber or leather boots should be worn. Do use near high heat or open flame. Do not take internally. Keep out of the reach of children.

**Disposal And Clean Up:**

Empty containers must be drip free. Cured product may be disposed of without restrictions. Excess liquid 'A' and 'B' material should be mixed together and allowed to cure, then disposed of in the normal manner. Cured materials may be stripped or peeled from plastic tools and containers. It is recommended that metal tools be cleaned within one hour of use by cutting or peeling cured material from tool.

**Warranty:**

HI-TECH warrants its products to be free of manufacturing defects and that they will meet HI-TECH's current published physical properties when applied in accordance with HI-TECH's directions and tested in accordance with ASTM and HI-TECH's standards. There are no other warranties by HI-TECH of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. HI-TECH Corporation shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, including any warranty of merchantability or fitness for a particular purpose or from any other cause whatsoever.