

# HI-TECH Systems

## "HT Fluid"

### Medium Viscosity Epoxy Resin

#### **Product Description:**

A solvent-free, moisture insensitive, two-component epoxy adhesive that structurally bonds new concrete to old concrete. It meets ASTM-C-881, Type I, II, IV, & V, Grade 2 Classes B and C for Epoxy Resin Adhesives.

#### **Applications:**

- ✓ Bonding fresh concrete to hardened concrete and steel.
- ✓ Grouting bolts, dowels, pins, etc.
- ✓ Grouting horizontal cracks in structural concrete and wood.
- ✓ Interior or exterior horizontal surfaces.
- ✓ Machinery and base-plate grout.
- ✓ Structural adhesive for concrete, masonry, metal, wood, etc.

#### **Advantages:**

- ✓ Super-strength bonding/grouting adhesive.
- ✓ Insensitive to moisture before, during and after cure.
- ✓ Excellent adhesion to concrete, masonry, metals, wood and most structural materials.
- ✓ Easy to mix 1:1 ratio between components.
- ✓ Easy to use for bonding/grouting applications.
- ✓ Fast initial set; rapid gain to ultimate strengths.

#### **Coverage:**

22oz. cartridge yields 37.9 cu. in. of epoxy fluid adhesive.

56oz. cartridge yields 96.32 cu. in. of epoxy fluid adhesive.

1 gal. Yields 231 cu. in. of epoxy fluid adhesive.

#### **Available In:**

Cartridges, (22 oz and 56 oz.) 2 Gallon Units, 10 Gallon Units and 110 Gallon Units

#### **Performance Data:**

Color (A+B)	Grey
Viscosity (mixed)	2500 cps
Mix Ratio (by volume)	1:1
Tack Free Thin Film at 77°F	5-6 hrs
Absorption ASTM D-570	0.61 %
Shrinkage ASTM C-883	Passes
Gel Time 100 grams at 77°F ASTM C-881	30 mins
Heat Deflection Temperature ASTM D-648	120°F
Bond Strength ASTM C-882 2 days 14 days	2,145 psi 2,428 psi
Compressive Strength @73°F ASTM D-695 7 days	11,200 psi
Tensile Strength @ 73°F 14 days ASTM D-638	4,500 psi
Flexural Strength ASTM D-790	7,500 psi
Shear Strength ASTM D-732	5,300 psi

#### **Shelf Life:**

1 year in original unopened container.

#### **Storage Conditions:**

Store at 40°F to 90° F. Condition material to 65° F and 85° F before using

#### **Consistency:**

Fluid, self-leveling.

#### **Pot Life:**

Approx. 30 mins.

#### **Appearance:**

Compound A = White B = Grey.

#### **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: Sand blast or use other approved mechanical means.

Steel: Sandblast to white metal finish.

**Bulk Mixing:** For bulk mixing pre-mix each component thoroughly. Proportion equal parts by volume of Component "A" and Component "B" through appropriate metered epoxy mixing equipment as recommended by the manufacture. 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 five minutes or nozzle blockage may result. *HT Fluid* bulk can be mixed with oven-dried aggregate, yielding an epoxy mortar blend.

**Limitations:**

- ✓ Minimum surface temperature 35°F
- ✓ Do not thin- solvents will prevent proper cure.
- ✓ Not for sealing cracks under hydrostatic pressure.
- ✓ Material is a vapor barrier after cure.
- ✓ Minimum age of concrete must be 21-28 days, depending on curing and drying conditions prior to application.
- ✓ Porous substrates must be tested for moisture vapor transmission prior to mortar application.

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 form 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.

**Safety:**