

# **HI-TECH Systems**

## **"HT-PE85"**

### **FLEXIBLE CONTROL JOINT FILLER**

**Product Description:**

The HT-PE85 is a technologically advanced, self leveling, non staining, 100% solids, two component, 1:1 ratio, Polyurea Elastomer joint and crack filler. Designed for concrete with low to medium thermal cycling. HT-PE85 cures rapidly and consistently in applications ranging from -20°F to 130°F. Product is tack free in 3 minutes. Applications can be reopened to vehicle or foot traffic in 1 hour.

**Applications:**

HT-PE85 is designed specifically for industrial floor applications, which receive heavy vehicle traffic, such as forklifts or steel wheeled carts. To fill interior random cracks, damaged control joints, or new control joints on horizontal concrete. Slightly flexible, allowing small slab movement, yet strong enough to protect the vertical edges of concrete from spalling under extreme loading. Interior and Exterior (exterior applications when little joint or crack movement from thermal cycling will occur.) Exposure to ultraviolet light may cause slight discoloration, however the physical properties are unaffected.

- ✓ Industrial Facilities
- ✓ Warehouse Floors
- ✓ Manufacturing Facilities
- ✓ Pulp and Paper Mills
- ✓ Bottling and Canning Facilities
- ✓ Airports
- ✓ Water and Waste Water Treatment
- ✓ Cold Storage Facilities
- ✓ Food Processing Facilities
- ✓ Freezers

**Advantages:**

- ✓ 100% Solids, Contains No VOC's
- ✓ Can be Polished without Smearing
- ✓ Meets USDA & FDA Requirements
- ✓ Return Project to Service in 60 Minutes
- ✓ Cures From -20°F to 130°F
- ✓ Odorless, No Toxic Vapors
- ✓ Resistant to Petrochemicals
- ✓ Remains Flexible, Even in Cold Temperatures

**Physical Properties:**

Color	A+B	Concrete Grey
Viscosity (mixed)		Self Leveling
Mix Ratio (by volume)		1:1
Pot Life 100 grms at 77°F		1 min
Tack Free (thin film) @ 77°F		3 min
Initial Cure		15 mins
Final Cure		60 mins
% of Elongation	ASTM D-412	190 min
Tensile Strength, psi	ASTM D-412	960 min
Shore "A" Hardness	ASTM D-2240	85-87 A
Tear Strength, pli, Die C	ASTM D-624	195 min

**Concrete Application Recommendations:**

Surface must be clean, sound, and dry. Remove dust, grease, curing compounds, waxes, foreign particles and disintegrated materials. **BULK MIXING** For bulk mixing, use a one to one ratio metered pump. Only component "B" side needs to be stirred before being loaded into pump. Do not allow material to reside in static mixing head or nozzle for more than 45 seconds or nozzle blockage may result.

**Available in:**

22 oz. Cartridges  
56 oz. Cartridges  
10 gal. Units

**Shelf Life:**

1 year in original unopened container.

**Storage Conditions:**

Store at 55°F-95°F.

**Consistency:**

Pourable, self-leveling liquid.

**Pot Life:**

Approx. 1-2 min. (100 gram mass)

**Appearance:**

Concrete Grey, Custom Color Matching Available

**Cartridge Coverage Rate:**

Width	1/4"	1/2"	3/4"	1"	1-1/4"	1-1/2"
1/4"	52.9					
1/2"	26.5	13.2				
3/4"	17.6	8.8	5.9			
1"	13.2	6.6	4.4	3.3		
1 1/4"	10.6	5.3	3.5	2.6	2.1	
1 1/2"	8.8	4.4	2.9	2.2	1.8	1.5
1 3/4"	7.6	3.8	2.5	1.9	1.5	1.2
2"	6.6	3.3	2.2	1.6	1.3	1.1
2 1/2"	5.3	2.6	1.8	1.3	1.1	.87
3"	4.4	2.2	1.5	1.1	.87	.73

**Limitations:**

- ✓ 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 28 days, depending on curing and drying conditions prior to applications.
- ✓ Not to be used in moving cracks or expansion joints.

**Chemical Resistance:**

Test Procedure; ASTM D-1308 @72°F  
 R=Recommend  
 RC=Recommend Conditional =some swelling or discoloration  
 N=Not Recommend  
 1=Some discoloration only

<u>Chemical</u>	<u>Result</u>
Acetic Acid 10 %	R
Acetone	RC
Battery Acid (Sulfuric Acid)	RC
Brake fluid	R
Chlorine (2,000 ppm in water)	R
Citric Acid	R
Gasoline	R
Hydraulic Oil	R-1
Methanol (5%) Gasoline	RC
Motor Oil	R-1
Toluene	RC
Vinegar	R
Water	R
Xylene	R

**Clean Up:**

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.

**Safety and Handling:**

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 provided. Long sleeved overall or disposable overalls, rubber gloves, splash shields, rubber or leather boots should be worn. Do not use ear high heat or open flame. Do not take internally. Keep out of the reach of children.

**First Aid:**

Remove any contaminated clothing. For eye contact, flush immediately with plenty of water for at least 15 minutes; contact physician immediately. For respiratory problems, remove person to fresh air. For skin contact, remove epoxy immediately with a dry cloth or paper towel. Wash area of contact thoroughly with soap and water. Solvents should not be used because they carry the irritant into the skin. Wash contaminated clothing prior to re-use. Cured products are innocuous.

**Warranty:**

HI-TECH warrants its products to be free of manufacturing defects 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.