



PE90

POLYUREA JOINT FILLER

The new formula of PE-90 is a technologically advanced, moisture insensitive, 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. PE-90 cures rapidly and consistently in applications ranging from -20°F to 130°F. Product is tack free in 5-15 minutes. Applications can be reopened to vehicle or foot traffic in 1 hour.

Applications

HT-PE90 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. Semi-rigid, 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
- Retail Facilities
- Pulp and Paper Mills
- Bottling and Canning Facilities
- Airports
- Water and Waste Water Treatment
- Food Processing Facilities

Advantages

- Moisture Insensitive
- Semi-Rigid to protect joint edges
- 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

Physical Properties

Color A+B	Varies, can be tinted
Viscosity (mixed)	Self Leveling
Mix Ratio (by volume)	1:1
Pot Life 100 grams at 74°F	35 seconds
Tack Free (thin film) @ 74°F	5-15 mins
Elongation % (ASTM D-412)	180-200
Tensile Strength, psi (ASTM D-412)	900-1000
Shore "A" Hardness (ASTM D-2240)	90-93 A
Tear Strength, Die B (ASTM D-624)	148
VOC Content (A & B)	0%

Available in

22 oz. Cartridges
10 Gallon Kits

Shelf Life

1 year in original unopened container.

Storage Conditions

Recommended storage temperature is between 75°F to 85°F. Do not store below 55°F or above 85°F.

Consistency

Pourable, self-leveling liquid

Pot Life

Approx. 30-35 seconds

Appearance

Semi clear, Color Matching Available

Material Coverage per Gallon

Consider approximately 15% for waste due uneven joint depth and width, overflow of material, nozzle waste, etc...

		Joint Width						
		1/8"	3/16"	1/4"	3/8"	1/2"	3/4"	1"
Joint Depth	1/8"	1232	821	616	411	308	205	154
	1/4"	616	411	308	205	154	103	77
	1/2"	308	205	154	103	77	51	39
	3/4"	205	137	103	68	51	34	26
	1"	154	103	77	51	39	26	19
	1 1/2"	103	68	51	34	26	19	13
	2"	77	51	39	26	19	13	10
	2 1/2"	62	41	31	21	15	10	7
	3"	51	34	26	17	13	8	6
	4"	39	26	19	13	10	7	5

Cartridge Calculation

1 gallon = 128 oz. Multiply gallons by 128 oz.
divide by cartridge size. 22 oz. cartridge example:
10 gals. x 128 oz. = 1280 oz. ÷ 22 oz. = 58 cartridges

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

Chemical	Result
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

Application Recommendations

Surface must be clean and sound. Remove dust, grease, curing compounds, waxes, foreign particles and disintegrated materials. 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 30 seconds or nozzle blockage may result.

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.

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

SDS will be mailed immediately upon receipt of a purchase order or upon request. All personnel should read and understand product Safety Data Sheets provided. Long sleeved overall or disposable overalls, rubber gloves, splash shields, rubber or leather boots should be worn. Do not use near 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.



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